Government of **Western Australia**
WA Country Health Service

Sustainable Health Review

WACHS SUBMISSION V 1.1

27 October 2017

Introduction

This submission is made on behalf of the WA Country Health Service (WACHS) Board and management. The Board welcomes the opportunity to provide a summary of the significant challenges facing country health communities and the critical importance of taking steps to ensure a sustainable health system into the future – one that recognises and enhances the delivery of services to country communities while ensuring the ongoing viability and sustainability of those services such that they are responsive to the needs of country communities into the future.

The WACHS Board would like to acknowledge the Sustainable Health Review panel for their commitment to ensuring that there were opportunities for consumers, clinicians, managers and staff from regional areas to contribute to the review. It is understood that there has been a high level of engagement by participants in the forums, which is reflective of the strong interest in health care within WACHS and more broadly in the community. A WACHS staff survey confirmed this extensive interest in providing input to the review, which is indicative of the passion and commitment of WACHS staff in the provision of health care to country communities.

WACHS has taken the opportunity within this submission to:

- provide an understanding of the service and health context in which country health operates
- highlight areas of focus and possible opportunities against each of the theme areas
- provide clear recommendations in areas where there is most to gain in terms of improvements to sustainability.

The recommendations made in this submission present a real and significant opportunity to enhance health outcomes for country Western Australians. Patient stories highlighting the difficulties experienced by country consumers, and how these recommendations can change the lives and futures of country people are provided at the end of this document.

This submission is made by the WACHS Board to the Sustainable Health Review Panel for their consideration.

Jeffrey Moffet

Chief Executive

WA Country Health Service

Recommendations

This submission presents comments and suggestions for change and improvement within the key Sustainable Health Review theme areas and reflects direct feedback from WACHS staff members and senior executives on ways in which the WA health system and WACHS can increase sustainability. The following recommendations reflect and encompass this feedback and represent what we consider to be the most significant, high priority and achievable options for increasing the sustainability of the country health system.

RECOMMENDATION 1: ENHANCE THE SYSTEM MANAGER COMMISSIONING AND PURCHASING MODELS

Future purchasing models need to be more agile and flexible with purchasing decisions based on sound evidence, knowledge and service demand modelling. More focus and effort is required to build knowledge and make purchasing decisions based on

- Research evidence and better understanding of value, patient outcomes.
- Contemporary evidence about what needs to be purchased and what treatments offer little or no benefit and should not be purchased.
- Continuous service and demand modelling.

The purchasing framework should also build in 'value based' reimbursement as part of the service payment to incentivise quality and efficiency improvement.

Furthermore the WA health system funding models need to recognise cost differentials in the delivery of services in rural and remote locations and be transparent in funding the community service obligations related to operating small, low volume based services in country communities with high fixed overheads. This requires:

- Greater flexibility around conversion of operating and capital funding sources.
- Greater Health Service Provider (HSP) autonomy and flexibility to managing their asset base.
- Provision of working capital and mechanisms to incentivise or enable HSPs to have levers to control their business.

RECOMMENDATION 2: IMPLEMENT MORE BILATERAL FUNDING AGREEMENTS

WA engages with the Commonwealth on funding reforms in the short to medium term with the aim of achieving a more equitable distribution of Commonwealth health funding being delivered to WA outside of the traditional pricing and funding mechanisms.

Negotiating bi-lateral agreements that provide increase supply side funding for specific areas such as:

- General practitioner (GP) and patient video conference consultations, recognised by the Medicare Benefit Scheme (MBS), for occasions where stable GP services are not available (weekends) or there are country GP vacancies.
- Flexibility around MBS billing in remote locations.
- Development of an alternate model of aged care provision for country areas where consumer driven demand is nonviable due to limited choice and constrained service capacity.
- Chronic disease coordination and monitoring.
- Investment in early childhood health and development.

- Aboriginal health initiatives
- Investment in core technology infrastructure and digital systems in smaller and remote communities to support virtual and digital health care services.
- Investment in research and economic analysis of health care models and services to determine where future health funding is best targeted.

RECOMMENDATION 3: ENSURE GEOGRAPHICALLY DISADVANTAGED POPULATION GROUPS HAVE EQUITABLE ACCESS TO QUALITY CARE

Clarify and articulate the roles and responsibilities between the Department of Health as system manager, WACHS, and metropolitan HSPs, identifying key areas of principal accountability and delineation, and associated opportunities for greater collaboration. This should include:

- Clear system responsibility for country patients to access tertiary and quaternary services, supported through policy for resource contracting.
- Accountability for these responsibilities articulated and measured through service agreements.

RECOMMENDATION 4: INVEST IN DIGITAL CAPABILITY TO ENSURE ACCESS TO TECHNOLOGY ACROSS WESTERN AUSTRALIA

Develop a clear WA health system Digital Strategy with key features of the strategy to include:

- Prioritisation of technology infrastructure and digital solutions for consumers with the most to gain due to their inherent disadvantage (cultural, geographical, social and through disability).
- An electronic health record as a priority foundational development.
- Clear plans for technology infrastructure investment in country areas.
- Leveraging of existing digital technology initiatives eg. Tele-oncology, tele-mental health, and tele-stroke developments and virtual (Emergency Telehealth Service (ETS)) services for obstetric and midwifery support and cardiotocograph foetal monitoring.
- Introduction of real time analytics and expanded clinical decision support.
- Positive opportunities for enhanced patient experience and consumer engagement eg. use of social media channels for communication and engagement for Aboriginal and youth mental health programs.

RECOMMENDATION 5: DEVELOP A WA HEALTH SYSTEM RESEARCH AND DEVELOPMENT STRATEGY

Develop a research and development (R&D) strategy that defines priority areas, and formally partners with R&D organisations to leverage required skills and professional support. The strategy should incorporate:

- Strengthened focus on research that determines economic drivers for health investment, introduction of new models of service delivery, and to identify areas for disinvestment.
- Ensure that research investment is positively biased towards areas where there are research gaps and/or where the research investment offers the greatest benefit to those experiencing health disadvantage within the community.
- Development of research priorities that are informed by the communities served by WACHS and by the healthcare workers providing the care, with input from WACHS to ensure there is consistent focus on priorities in rural and remote health and that research outcomes are translatable to the regions.
- Capacity for research collaboration among HSPs.

- Stronger links across research institutions to capture the benefits from other research projects and to build on work done in rural and remote health care nationally and internationally.
- Identification of opportunities to invest in human resources and education to maximise clinical research translation to the bedside.

RECOMMENDATION 6: IMPLEMENT A REGIONAL COMMISSIONING PILOT FOR THE KIMBERLEY REGION

In order for fragmentation and duplication to be improved, it is funding and commissioning that requires improvement, and consequently provider behaviour. It is proposed that the WA health system negotiates with the Commonwealth to trial a single health services commissioning model in the Kimberley. The model is to be based on a single independent commissioning body that will plan, in collaboration with the local communities, the services they need and commission providers to deliver these services.

The principles of the model to include:

- The Commonwealth and State Government's contribution to be based on capitated and pooled population funding adjusted for cost disadvantage
- A funding allocation to be identified for each community and a single contract awarded to a provider for the provision of services based on outcome measures.
- Providers selected based on their capacity to manage and deliver a suite of services to a community. Niche services may be purchased by the provider in a coordinated and controlled manner.
- Identified outcomes that include equitable distribution of government funding, services directed to areas of need, clear accountability for health outcome improvement, reduced project administration and reporting overheads, longer term stable funding that is flexible and able to be directed to areas of need, and improved coordination and management of service providers.

RECOMMENDATION 7: DEVELOP AN AGED CARE STRATEGY TO ADDRESS THE NEEDS OF PEOPLE AGEING IN WA, PARTICULARLY COUNTRY WA

Development of a contemporary State Aged Care Strategy to incorporate:

- Implementing a changing consumer focus with enablement, well-ageing and equipping staff to provide quality care.
- A planned response to service demand, including an ageing population, acute and subacute models of care, restorative care, chronic disease management, and community care sector reform.
- Technology enabled solutions
- Increased aged care places in country WA

RECOMMENDATION 8: DEVELOP A PATIENT TRANSPORT AND AMBULANCE STRATEGY

Development of a contemporary WACHS Patient Transport and Ambulance Strategy to incorporate:

- A model for development in country ambulance services, underpinned by a clear State policy commitment to country communities to provide equitable, safe and reliable ambulance services.
- Review and reform of the State Government's treatment for capital funding of the Royal Flying Doctor Service aircraft and infrastructure.
- Full economic and social analysis of the Patient Assisted Travel Scheme requirements and usage against alternate clinical pathways to support future investment decisions and reduce patient transport costs.

RECOMMENDATION 9: INVEST IN EARLY YEARS TO IMPROVE THE HEALTH OF THE POPULATION

Renew, enhance and expand the *WACHS Healthy Country Kids Program*[1].to further develop and embed the strategy's objectives and increase investment in, and integration of, services. This should include:

- The development and implementation of a Community Health Information System to provide connected and appropriate clinical information systems to enhance integration and coordination between hospital and community-based child health and development services, especially for children with complex health and developmental needs.
- Early years investment that is focused on the socio-economic benefits of interventions to health cost and outcomes.

RECOMMENDATION 10: DEVELOP A WORKFORCE STRATEGY TO ADDRESS WORKFORCE CHALLENGES IN COUNTRY WA

Development of a contemporary Workforce Strategy for country health that includes:

- A clear plan for the WA health system to have greater input and control over GP and specialist training and placement in WA, with buy-in and accountability from the university and specialist vocational training sectors.
- A WA Health strategy / policy to support distribution and supply of general and specialist and proceduralist GPs because it is a State responsibility to ensure equitable access to quality care which relies on also having equitable access to a skilled workforce (*Note: approx.. 50% of WACHS medical practitioners are International Medical Graduates*).

RECOMMENDATION 11: STRENGTHEN ABORIGINAL HEALTH POLICY TOWARD PREVENTION

- Direct policy toward active commissioning of services targeting health avoidance and early intervention in vulnerable populations. In addition to a focus on early years of 0–5 years, this should particularly target obesity, diabetes, renal and cardiovascular disease.
- Develop a strategy for consumer engagement and improved health literacy to support informed healthcare decisions.
- Ensure the WA health system has an active involvement in remote community reforms and working with WACHS in the development of strategies for addressing the social determinants of health and their impact on Aboriginal lives, health inputs and cost.

RECOMMENDATION 12: ENABLE HSPS TO REINVEST BUDGET SAVINGS TO SUPPORT INNOVATION

- Seek WA Government and Department of Treasury support to vary the budget allocation model to allow for HSPs to reinvest budget savings to fund innovation and reform. Establish a WACHS Transformation Account and plan potential areas for reform and reinvestment.

[1] WACHS Healthy Country Kids Program: An Integrated Child Health and Development Service Strategy 2016 – 2019 (May 2016)

Development of this submission

The WACHS submission has been developed based on feedback from Executive leads for WACHS portfolio areas targeted to the key Sustainable Health Review theme areas, as well as individual submissions from Regional Executive teams. Input from staff across WACHS has been facilitated through an organisation-wide survey with questions directed at each of the theme areas. More than 500 responses were received from staff across professions and locations, representing a high level of engagement by staff in the review.

The Country Health Aboriginal Workforce Advisory Committee (CHAWC) also provided input and feedback to the submission against each of the key theme areas.

In recognition of the need for the WACHS submission to reflect the views of the wider community relating to health care in the country, the survey was provided to the Chairs of all District Health Advisory Committees (DHACs) and 17 survey respondents identified themselves as belonging to a DHAC.

The WACHS Executive and the WACHS Board also led discussions regarding priorities for country communities, highlighting opportunities and initiatives to improve the sustainability of country health into the future, which feature prominently in the recommendations section of this report.

This report is not intended to be exhaustive. The health system is complex, with the country health system uniquely so, given the many providers and funding arrangements, and cannot be fully described or reformed within such a short submission. It also does not fully contain all feedback received, as many of the suggestions were internally focused issues where the resolution is within the control of WACHS to address, and as such will be incorporated into the data collection stage of the WACHS strategic planning process.

This submission includes recommendations that have been supported by the WACHS Board and Chief Executive, to be taken forward as options for achieving sustainability within the WA country health system into the future.

Note: for the purposes of this submission, WACHS has adopted the Sustainable Health Review definition of sustainability which is to: '*Use finite funding and limited resources in the most effective way, to meet our communities' current health needs without compromising the State's ability to meet needs in the future'.*

Country Health in context

WACHS provides health care to regional West Australians across an area spanning 2.55 million square kilometres, and is the largest country health system in Australia. Around 21 per cent of the Western Australian population (531,934 people[2]) resides within regional WA. Of this, 10 per cent (52,588 people[3]) identify as Aboriginal people, compared with just two per cent of the metropolitan population. The proportion of Aboriginal people in the population varies immensely between the regions, from three per cent in the South West up to 45 per cent in the Kimberley[4].

WACHS's primary responsibility is to provide hospital and related services to the population it serves. The population in regional WA is diverse and expansive and as a result has widely varying health needs. The health status of country people is often worse than the metropolitan population with a higher rate of illness and co-morbidity, particularly in areas where GPs and other primary health care services are limited or not available. Government figures indicate that in WA there are 77 GPs per 100,000 compared to a National average of 95 GPs per 100,000[5]. This translates into an estimated $430M per year shortfall in Medicare benefits funding for community-based services. Rural Health West estimates that $100M of the $430M Medicare shortfall is lost in country areas due to the lack of access to GPs[6].

WACHS is the major provider of hospital, health, mental health and aged care services across country WA. It is funded to provide emergency care in hospitals and nursing posts, as well as hospital-based acute services such as general medical, general surgery, mental health, obstetrics, renal dialysis and cancer services. It is also responsible for the provision of maternal and child health, public health, health promotion, chronic conditions services, mental health, drug and alcohol services and sub and post-acute services such as palliative care and rehabilitation.

In country WA, population growth and ageing in many communities is impacting on access to appropriate aged care beds and services. The total number of people aged 70 years and above has increased 21 per cent in the past five years, to more than 44,500. This age group is projected to grow 25 per cent in the next five years[7]. The impact of an ageing population on the demand for health and older adult mental health services is well established. An ageing population changes both the mix and volume of medical procedures and services required.

Primary and aged care services are the primary responsibility of the Australian Government, however the current fee-for-service and consumer-driven funding arrangements means that the State is often required to fill the gaps. In country WA where service viability often leads to market failure in many communities, WACHS is required to fill these primary care and aged care service gaps. This ultimately has resulted in less GPs, less pharmacies and less aged care providers per capita in the bush.

Health costs per capita are higher in regional areas and are impacted by workforce attraction and retention challenges, geographical spread and scale of operations, accommodation costs and significant transport costs. Filling the resulting deficit in GP, aged care or other health services is achieved either wholly, or in partnership with the Australian Government or local government. Additionally, to provide services and improve Aboriginal health and primary care for the regional WA population, important partnerships have been developed with other health services, government departments and non-government organisations. Where

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[2] Australian Bureau of Statistics Estimated Resident Population (ERP) data (2016)
[3] Australian Bureau of Statistics Estimated Resident Population (ERP) data (2016)
[4] WA Country Health Service Health Profile Summary - Selected conditions only (March 2017)
[5] *WA missing out on $430 million annually due to GP shortage: Former Health Department head*, Emily PIESSE, ABC News (5 Aug. 2017) (http://www.abc.net.au/news/2017-08-05/kim-snowball-offers-health-advice-to-wa-government/8776100)
[6] *WA missing out on $430 million annually due to GP shortage: Former Health Department head*, Emily PIESSE, ABC News (5 Aug. 2017) (http://www.abc.net.au/news/2017-08-05/kim-snowball-offers-health-advice-to-wa-government/8776100)
[7] WA Country Health Service Annual Report 2014–15, Department of Health (2015)

WACHS is required to provide these services, because there is a service need that cannot be met otherwise, the costs of doing so are generally not adequately recognised or met.

The vast spread of the population and the corresponding small population numbers mean that WACHS cannot sustain complete services to all population groups across regional WA. Significant factors driving service demand include changes in population and population demographics, increased availability in the scope of local services and a higher than average burden of disease in Aboriginal and rural populations.

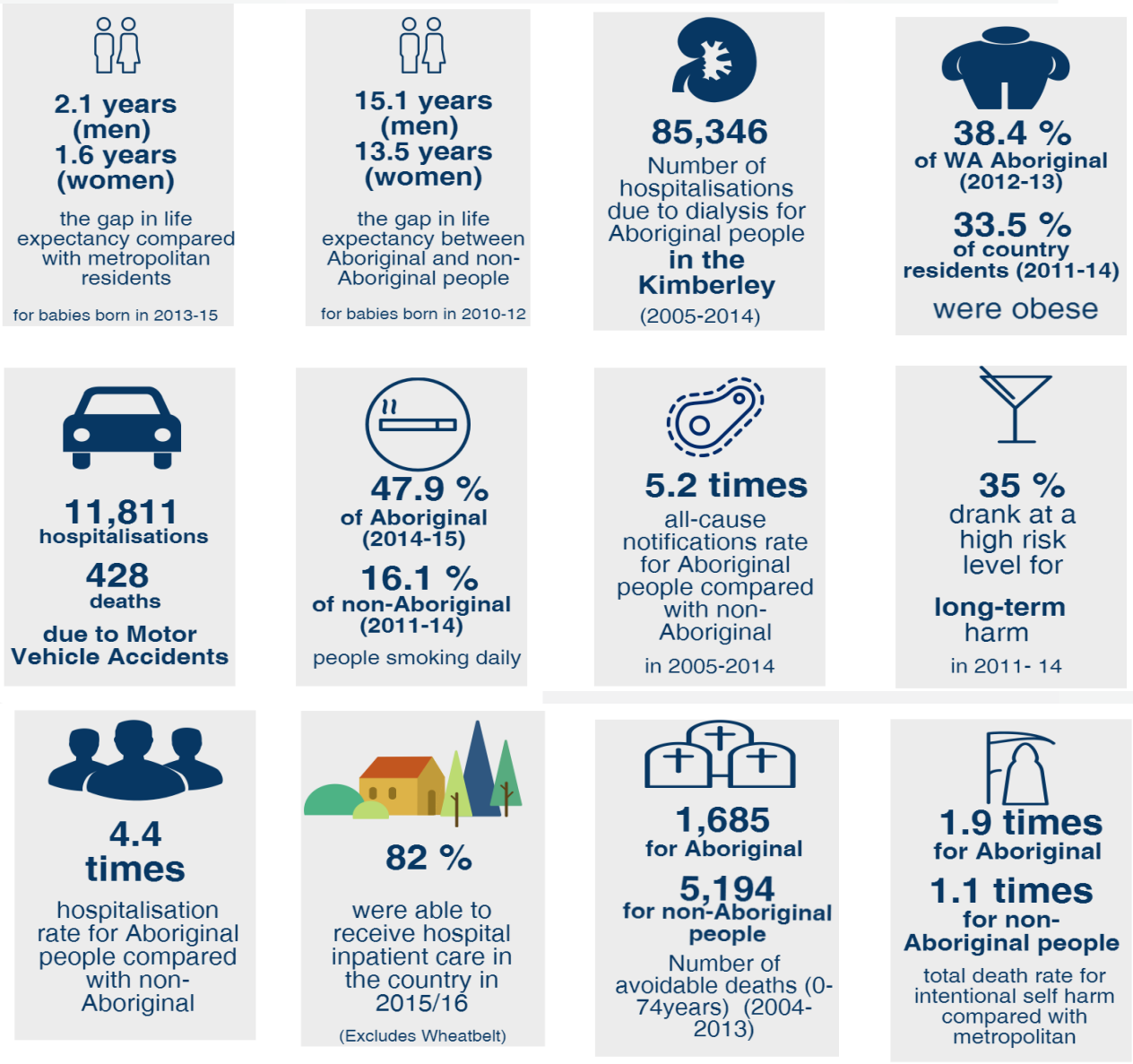
Systemic demographic factors also continue to be a driver, with the ageing regional population affecting residential and community aged care places. Comprehensive health services are required by, and provided to, people living in regional WA. However, limitations to service capability and capacity leads to some consumers not being able to stay in their home towns, especially as their care needs increase or become more specialised. Where this occurs, consumers need to navigate across the healthcare system, often requiring transport, acute, inpatient and outpatient services from metropolitan health services or the non-government sector.

HEALTH STATUS OF THE REGIONAL POPULATION

People living in rural and remote areas tend to experience poorer general health than those who reside in metropolitan areas as shown below (see Figure 1)[8]:

[8] WA Country Health Service Health Profile Summary - Selected conditions only (March 2017)

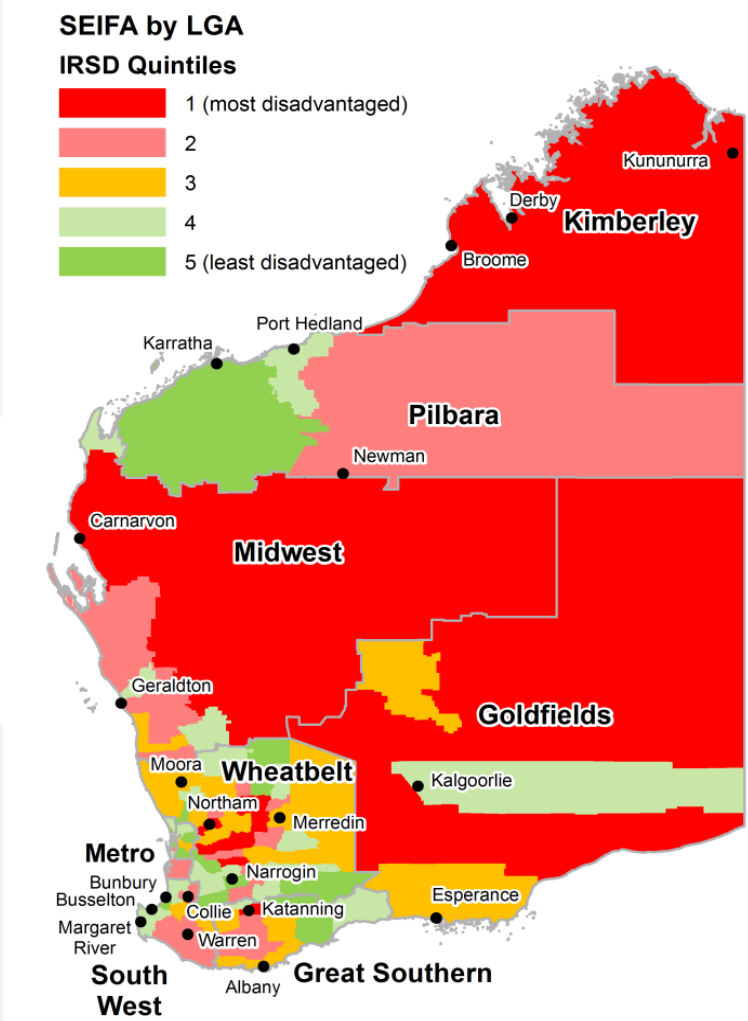
Figure 1: Key health issues for WACHS residents



The burden of disease is higher in people living in socio-economically disadvantaged areas. The Australian Bureau of Statistics (ABS) use the Index of Relative Socio-economic Disadvantage (ISRD) to classify geographic areas in Australia into five levels of socio-economic disadvantage, where level one is the most and level five the least disadvantaged area (see Figure 2)[9]. **Seven per cent of metropolitan residents reside in locations that are classified as the most disadvantaged (level one and two), compared with 41 per cent of WACHS residents who live at this level of disadvantage.**

[9] WA Country Health Service Health Profile Summary - Selected conditions only (March 2017)

Figure 2: Map of WACHS regions by SEIFA quintiles



Aboriginal children in country WA are two to three times more likely to die before 12 months of age, be born prematurely, and have a low birth weight, compared with non-Aboriginal children. Aboriginal children are nearly 30 times more likely to suffer from anaemia and malnutrition in the first four years of life and suffer infectious and parasitic diseases, compared with non-Aboriginal children.

Country people experience higher rates of chronic conditions than people living in the city and many of these conditions are lifestyle related. In 2015, 35 per cent of country residents were obese compared with 25 per cent of metropolitan residents. More country people drink and smoke at high-risk levels compared with people living in the city and rates of trachoma, diarrhoeal disease and skin infections are higher in remote communities. The rates of death from intentional self-harm are high in country WA compared with metropolitan rates (1.9 times for Aboriginal and 1.1 times for non-Aboriginal people)[10][11].

Country residents are more likely than metropolitan residents to have potentially preventable hospitalisations such as for diabetes, some cancers, respiratory diseases, circulatory diseases, cellulitis and ear, nose and throat conditions. Hospitalisations for many of these types of potentially preventable conditions are greater in the Kimberley and other northern WA areas, for example, hospitalisation for respiratory disease is 4.2 times higher, cardiac failure is four times higher and cellulitis is 5.4 times higher in the Kimberley than the State rates.

Country people are 1.4 times more likely to be hospitalised for respiratory diseases, cellulitis, epilepsy and ear, nose and throat infections, 1.3 times for diabetes and impaired glucose regulation and 1.2 times for dialysis, injury and poisoning compared to statewide rates. In contrast, metropolitan residents are hospitalised at less than the State rates for all these conditions (0.9 times the State rates).

Aboriginal people living in country WA are 34.8 times more likely to require hospitalisation for dialysis than non-Aboriginal people living in country WA. The rate of diabetes-related hospitalisations is greater in the

[10] WA Country Health Service Health Profile Summary - Selected conditions only (March 2017)
[11] Annual Report 2016–17, WA Country Health Service (2017)

northern regions of WACHS (7.6 times higher in the Kimberley, 2.6 in the Pilbara and 1.7 in Goldfields) than the State rates.

Motor vehicle accidents lead to significantly more hospitalisations and deaths for country residents compared with metropolitan areas. The country motor vehicle accident death rate is 2.2 times the State rate[12] (see Figure 1).

Environment, housing, transport, education, employment, workforce challenges, and access to healthcare providers, healthy lifestyles and services contribute to the poorer health outcomes and health inequity seen in regional WA populations compared to the metropolitan population. This disparity means that greater effort and investment in innovative models, telehealth and other technologies, as well as partnerships with other health providers, is critical in working towards health equity. Initiatives aimed at improving access to these services have been implemented with the intent of improving detection of chronic and other health conditions.

[12] WA Country Health Service Health Profile Summary - Selected conditions only (March 2017)

Service Approach – WACHS

The current service approach for WACHS is consistent with outcomes of both the *Country Health Services Review* from 2003 and the *Reid Report* from 2004.

The *Country Health Services Review (2003)* and the *Reid Report* (2004) recommended:

- improved access to country health services through culturally secure health services
- redevelopment of the larger country health facilities
- integrated and networked health services across regions
- greater use of telehealth
- formal links between country and metropolitan health services.

The *Read Report* endorsed the implementation of regional 'hub and spoke' models where smaller country hospitals and health services feed into, and are supported by, six designated regional health campuses (formerly known as regional resource centres). These regional health campuses are located in Albany, Broome, Bunbury, Geraldton, Kalgoorlie and South Hedland.

A regional health campus for the Wheatbelt was never planned given its proximity to general and tertiary hospitals in Perth. However, it was envisaged that the outer metropolitan general hospitals (for example, those located at Midland and Joondalup) would be the referral centres for the Wheatbelt to provide Wheatbelt people with non-tertiary (secondary) hospital care similar to that provided by regional health campuses.

Despite the challenges of vast distances and health inequalities, WACHS offers a wide range of health services to country residents and visitors. Integrated care for country patients is provided through the primary, secondary and tertiary healthcare system and achieves this through partnering with other health service providers including metropolitan hospitals and patient transport providers. This encompasses:

- emergency and hospital services
- population, public and primary health care
- mental health, drug and alcohol services
- Aboriginal health services
- child and community health services
- residential and community aged care services.

The scope and complexity of these services, now and into the future, is outlined in the State's Clinical Services Framework[13] (CSF) but WACHS generally provides less complex hospital treatment than provided in the tertiary settings of the metropolitan area. There are no tertiary hospital services in the country and far fewer resident doctors – with many medical services provided by visiting specialists from Perth or occasionally other states, visiting medical practitioners who may also be country GPs and registrars on training rotations.

Provision of country health services is reliant on the level of support provided by metropolitan public and private health providers and having robust patient transport services to support the provision of emergency

[13] *WA Health Clinical Services Framework 2014–2024,* Health System Improvement Unit, Department of Health (2015)

medical treatment where services are unable to be provided locally. Apart from established formal arrangements for emergency patient transfer to metropolitan areas, much of the support and services provided by metropolitan providers to country communities is historically based and remains largely fragmented.

WACHS is divided into seven regions and operates 68 gazetted hospitals and numerous health centres and facilities as shown in Figure 3. Key features include:

- WACHS employs more than 8000 staff (7700 FTE)
- annual budget of $1.7 billion
- 66,250 multi day and 79,350 same day separations from country public hospitals
- 388,000 (Emergency Department) ED presentations – about 40 per cent of the State's emergency activity
- 4961 births[14]
- operates 550 residential aged care beds.

Patient transport subsidy scheme

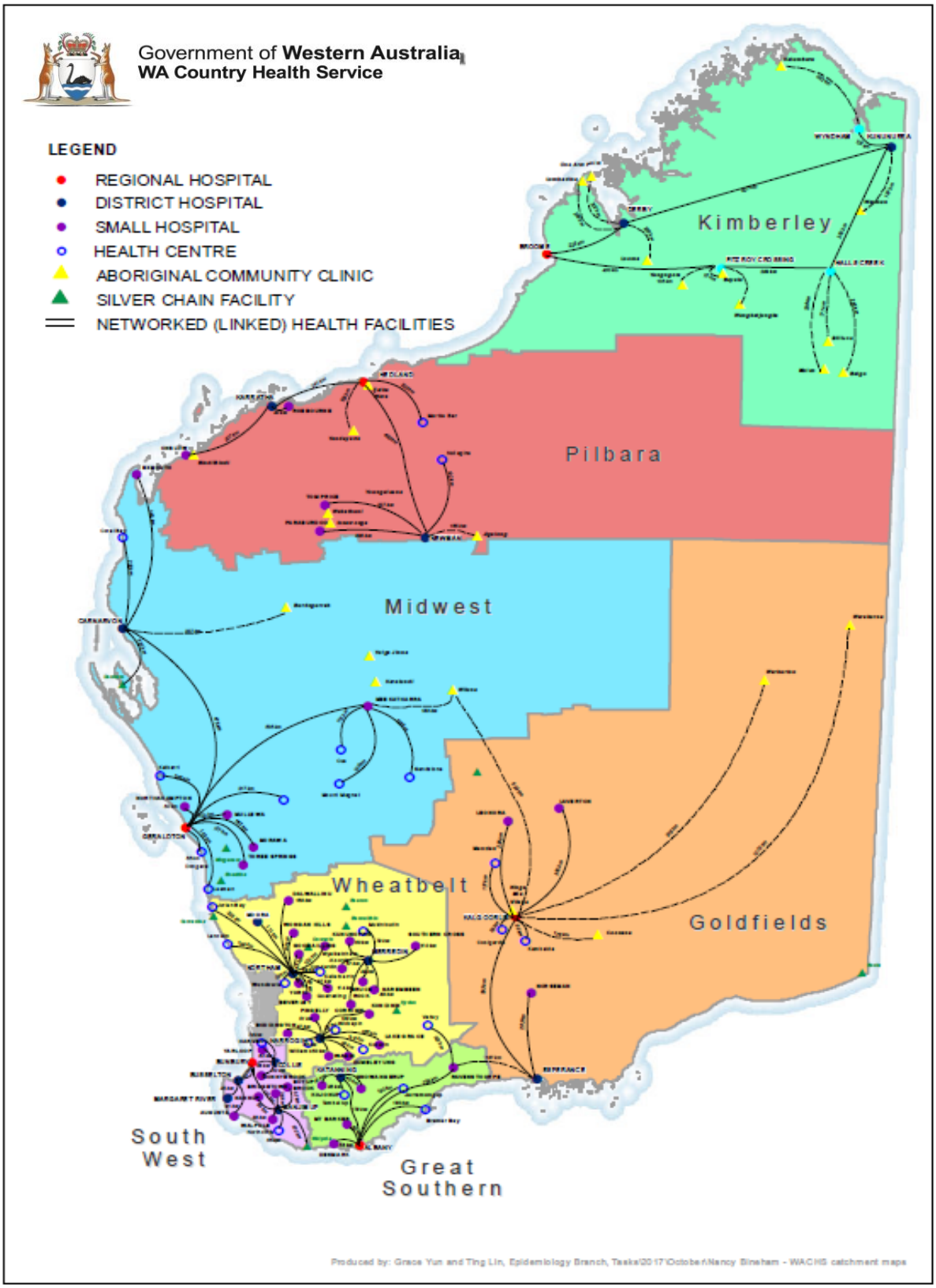
The Patient Assisted Travel Scheme (PATS) assists country residents who need to travel more than 100 kilometres to access specialist medical services, providing travel and accommodation subsidies for eligible clients and their escorts. In 2016– 17, more than 38,000 country residents accessed the scheme at a cost of approximately $32 million. This represents more than 94,000 return trips, most of which are outpatient appointments. About 78 per cent of all PATS trips are to the metropolitan area.

The WA Telehealth network provides access to clinical services, primarily via videoconference, where clinically appropriate. Delivery of telehealth outpatient services are largely dependent on metropolitan specialists offering this mode of service delivery, as well as the identification and coordination of suitable patients and appointments at both the metropolitan and rural ends. In 2015–16, there were approximately 12,000 clinically related telehealth consultations with approximately 7800 specialist appointments. Some specialties have embraced telehealth as a mode of service delivery with the burns and plastics specialties performing more than 4000 telehealth specialist appointments in 2015–16. During the same period, neurology conducted about one-third of their nearly 3000 appointments by telehealth. While a range of specialties have adopted telehealth, others have relatively low levels of usage.

The top specialties for patient travel by PATS activity are orthopaedics, oncology, ophthalmology, the ear nose and throat specialty, general surgery and cardiology. Recent modelling has been undertaken by WACHS around PATS trips and the potential for telehealth to reduce patient travel and keep patients closer to home. This looked at PATS trips in suitable medical specialties for a follow-up (or subsequent) appointment. Based on an assumption that at least one appointment per patient per year could be performed via telehealth, the modelling indicated that an estimated 8590 PATS trips could be saved per year, representing a potential PATS savings of $2.9M. However, the full cost benefit of substituting PATS travel and face-to-face consults with telehealth is not yet fully understood. Similarly outreach and visiting specialists to country centres offer social and economic benefits for country patients, meeting a social commitment to deliver services closer to where people live and avoiding some PATS related travel, but the extent and net cost benefit to the health budget is not clear.

[14] Midwives Notification System, Maternal and Child Health Unit, WA Department of Health (2015/16 data, live births)

Figure 3: WA Country Health Service – Map of Regions



Country Health – challenges & progress

Delivering health care within WA presents many challenges. The WA healthcare system is unique, and includes some of the most physically remote geography in the world. In addition to the geographical challenges, WACHS faces some more systemic challenges when delivering health care to country communities. These include the following:

- The Activity Based Funding (ABF) model which determines WACHS funding arrangements is based on an Independent Hospital Pricing Authority (IHPA) model which does not adequately recognise costs specific to providing care in regional WA such as location-based costs (for example, staff accommodation, allowances, travel, turnover and utilities), and costs of scale (patient activity volumes do not generate sufficient revenue to offset the minimum cost of providing the service).
- WACHS is the 'provider of last resort' in some areas that are outside the ordinary State scope and responsibility, but these services continue to be provided because WACHS are best placed to do so, and there is no reasonable alternative. Continued expectation that the service be delivered, a commitment by WACHS to deliver on this expectation, and the inadequate funding of these services is a potential threat to the financial efficiency and sustainability of WACHS (for example disability services, aged care and primary care).
- The geography and population demographics, and resulting service model in country areas sometimes results in longer-term retention of patients in high-cost acute settings rather than in alternative accommodation such as aged care placements, sub-acute services, or mental health step-down facilities which results in capacity pressures for acute hospitals.
- Infrastructure for small hospitals in regional and remote areas is ageing. While there has been some investment and progress in improving infrastructure over the past 10 years, with so many hospitals and facilities, responding quickly and flexibly to the changing healthcare needs of the community can take significant time and require significant investment.
- Difficulties in attracting and retaining clinical staff to ensure the uninterrupted provision of safe medical, nursing and allied health care within regional areas challenges our ability to provide accessible and quality health services. Some of our health services are in remote locations and attracting and retaining permanent clinical staff to these locations is often difficult due to the broader 'liveability' considerations for staff, and particularly their families. The higher cost of recruitment, relocation, housing and attrition add significant overhead to labour costs and significantly increase the overall cost of delivering services in these areas.

STRATEGIC PROGRESS

While WACHS understands the many challenges faced by the organisation, we are the first to recognise that with challenge comes opportunity, and in true country tradition, we aim to meet these challenges, on behalf of our patients and communities. Significant strategic progress has occurred over many years to improve service to our country communities.

WACHS, through its capital planning processes, government funding and industry investment, has brought about significant improvement to country healthcare over the past few years. More towns now have contemporary health campuses, expanded hospitals, greater emergency service capacity and modern facilities and equipment. Coupled with technological and service innovations such as telehealth, WACHS is now delivering health care closer to home for more country Western Australians than ever before.

There has been significant investment in modernising and upgrading WACHS hospitals to better reflect the needs of contemporary health care. This has included ongoing capital investment aimed at facilitating higher levels of self-sufficiency (that is, retaining more patients) within the regions, namely improved access and quality of emergency and primary care, improved inpatient services and using technology to enable more patients to access care closer to home.

WACHS continues to reduce hospitalisation and length of stay through better care coordination and links with primary care. Services are expanding in some areas, particularly in areas of child health and development, chronic disease prevention, coordination and management, and acute mental health. There is direct emphasis on expanding chronic disease programs and delivering cancer and renal services closer to home.

WACHS seeks to improve service access and health outcomes through a focus on innovation and sustained service availability. Initiatives in this area include:

- Emergency services enhancement – securing medical and nursing cover for country EDs supported by the expansion of the ETS to seven days each week.
- The development of a WACHS Link service to assist with the transfer and care coordination between WACHS and metropolitan hospitals for unplanned and planned hospital admissions.
- Primary care services investment to improve access to GP services.
- Expansion of early years services with a focus on Aboriginal children, their families and other vulnerable groups through the implementation of the *WACHS Healthy Country Kids Program*[15].
- The Child Development Service Framework[16], providing a consistent and family-centred approach to these services and guiding service planning, delivery and performance.
- Development of the Community Health Information System that supports significant improvement in child and community health services, ensuring that data capture informs service improvement and coordination.
- Continuation of key initiatives and programs, including the Improving Ear, Eye and Oral Health Initiative, the WA Trachoma Program, the Footprints to Better Health and Aboriginal Comprehensive Primary Care Programs.
- The Chronic Conditions and Hospital Avoidance program's expansion with the introduction of asthma and diabetes tele-education services with key non-government partners.
- Continued development and expansion of renal services, including the establishment of multidisciplinary regional renal teams, increased dialysis services and renal hostel accommodation under construction.
- Cancer services development of tele-oncology and new infrastructure, including patient accommodation.
- The continued development of the Tele-Mental Health Program, Aboriginal and Youth Mental Health Programs.
- Implementation of a Stroke Model of Care and introduction of tele-stroke services.
- Establishment of a Clinical Lead Geriatric Medicine to support acute and sub-acute aged care services, continued provision of residential and community aged care and investment in age appropriate accommodation.

[15] WACHS Healthy Country Kids Program: An Integrated Child Health and Development Service Strategy 2016 – 2019 (May 2016)
[16] Healthy Country Kids Program: Child Development Service Framework (January 2017) WA Country Health Service

- Country Health Connect, a Perth-based service, providing culturally appropriate support to Aboriginal people who need to travel to Perth for specialist medical assessment and intervention.
- An extensive hospital and health service infrastructure program aligned to the refined CSF.
- Joint service planning with the WA Primary Health Alliance and Regional Aboriginal Health Forums that supports partnership opportunities in service provision and improved resource targeting to address identified needs.
- Corporate Equip Accreditation – leadership in improvement and recognition of corporate systems for safety and quality through self-nomination for standards review. WACHS is only the second health service nationally to embark on this program which assesses corporate quality systems against national safety and quality standards. Accreditation has been achieved with all mandatory criteria met.
- First WA health service provider to implement Patient Opinion to facilitate consumer feedback on services through a moderated social media platform.
- Information and communications technology (ICT) investment program including WACHS-led improvements to enhance information technology (IT) infrastructure for core and clinical systems in country hospitals.
- Telehealth and tele-stroke – partnering country clinicians with metropolitan-based specialists to deliver lifesaving care in real time.

Opportunities for more sustainable country health care

The Sustainable Health Review process offers an opportunity to help shape future initiatives that will assist to achieve sustainability for the health system into the future. This section aims to highlight opportunities that WACHS believes, if supported, can deliver improvements to the delivery of services, the use of technology, patient transport and coordinated care. This section is organised against each of the Sustainable Health Review theme areas.

QUALITY AND VALUE

Digital Strategy

WA Health requires a digital strategy to support improved access to 'real time' data and analytics that support clinical staff and managers to support clinical decision making. This could include the provision of interactive dashboards which allow clinicians to monitor complications of care, unplanned re-presentations and readmissions. Engagement by clinicians in the strategy would ensure greater involvement in the configuration and implementation of IT systems, for example. electronic discharge summaries and other clinical applications to ensure they add value, are based on clinical workflows, are linked and easy to use.

The digital strategy could guide expansion of virtual services, for example ETS for obstetric and midwifery support, and emergency acute inpatient service for deteriorating patients. The strategy could further explore the use and applicability of remote monitoring systems, for example cardiotocograph foetal monitoring, systems to enable digitised and systemised inpatient monitoring for acute conditions including treatment adjustment, and recognition and response to deterioration.

Quality and value can be enhanced through an integrated and accessible electronic health record (EHR). These have been proven to improve patient safety and clinical decision making, reduce duplicate and unnecessary investigations (particularly pathology and radiological investigations) thus improving the patient experience.

Safer leadership and culture

It is important to ensure that the leadership and culture of the health system is focused towards safety, and this can be achieved in many ways. Quality and value of services could be enhanced through engagement with universities to ensure patient safety and quality principles and human factors are an integrated component of health professional undergraduate curricula.

Leadership development programs for clinicians can be reviewed and refocused toward clinical leadership to ensure a strong emphasis in programs on patient safety and quality.

Sustainable 'Human Error Patient Safety' programs can be used to better equip clinicians and other staff with knowledge of human factors and strategies to support safer practice, for example situational awareness, risk assessment, team work, and communication skills such as graded assertion.

Workforce engagement can be used to engage the workforce in health service redesign and safer systems. Examples of these include:

- Breaking the Rules for Better Care[17] (Institute of Healthcare Improvement) – "If you could break or change one rule in service of a better care experience for patients or staff, what would it be and why?".
- Listening into Action[18] (Implemented in multiple National Health Service (UK) (NHS) Trusts) – teams are supported and enabled to work differently in a way that 'switches them on', links to business outcomes they care about, makes them feel valued, and gives them 'permission to act'.
- **Speaking up for safety**. Program supporting cultural change through targeted reporting by clinicians of non-adherence to expected standards of safety and quality.

Reducing variation and healthcare-acquired complications

There is an opportunity to enhance collaboration between HSPs and State Clinical Networks in the development of clinical policies, standards, procedures, pathways and medical record forms to create economies of scale and reduce clinical variation, clinical risk, and duplication of effort.

Coordinated statewide data for timely analysis of cost, variation and harm, for example hospital-acquired complications, readmissions, re-presentations to ED and increased length of stay will assist to reduce variation and healthcare-acquired complications.

WACHS and HSP's could provide leadership and coordination to the implementation of agreed high risk/high volume interventions, exploring contemporary models and partnerships with industry recognised leaders, for example NSW CEC, Safer Care Victoria, Safer Salford (NHS), and the Scottish Patient Safety Programme to achieve this, focusing on, for example:

- High burden/high cost complications or adverse events such as infection control interventions (peripheral intravenous cannulas, urinary catheters), venous thromboembolism.
- National Clinical Care Standards such as acute myocardial infarction, hip fracture.

Expanded safety and quality focus to include primary, long-term care and continuity of care

There is an opportunity to expand safety and quality to include primary, long-term care and continuity of care. This could be achieved through partnering with external providers to focus on patient journeys and interventions to address unintended harm that represents a significant cost burden on public health facilities, for example:

- Working with RAC providers to reduce emergency admissions from RAC homes arising from preventable complications such as falls, pressure injuries, and medication adverse events.
- Working with primary care providers to improve medication management.

Medicare billing

MBS specialist item number development has improved access to services for country patients, particularly through telehealth. Further development and expansion is required to provide greater opportunity for:

- Increased access to GPs through telehealth and technology, to reduce the cost of travel and improve clinical resource efficiency.

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[17] Breaking the Rules for Better Care, Institute for Healthcare Improvement 2017 (http://www.ihi.org/Engage/collaboratives/LeadershipAlliance/Pages/Breaking-the-Rules.aspx?utm_campaign=2017%20Leadership%20Alliance%20recruitment%3A%20Y4&utm_source=hs_email&utm_medium=email&utm_content=55811028&_hsenc=p2ANqtz-9YZpFxcC019XX3AdPJITqPZlGNtKdNR-QwPl4MONM6gjToW7RicNJwaWqwwUW7WqWVzx27GbAiMprpngq-GJqT0GNMUS_4Z1mzrs3AFYn7TUGM_PU&_hsmi=55811028)

[18] Listening Into Action 2017 (http://www.listeningintoaction.co.uk/)

- Expanded item numbers for nurses and Aboriginal health workers/practitioners in targeted geographical areas to improve access to services for Aboriginal people. This is particularly needed for sexual health testing and interventions to address the increasing prevalence of sexually transmitted disease.

Focus on proactive clinical risk management

There is an opportunity to focus on proactive clinical risk management. This can be achieved by creating capacity through knowledge and resources, for proactive clinical risk approaches such as Healthcare Failure Modes Effect Analysis to look at what could go wrong and ensure controls are in place to prevent these events.

Opportunities to partner with external bodies such as universities with expertise in human factors and engineering for reliability could be explored to advance opportunities for education and research applicable for health care.

There is also an opportunity to review systems for planning, procurement and management of assets for example clinical equipment, pharmaceuticals and ICT clinical software systems. This would ensure safety and quality are primary considerations, reduce variation and ensure design and function is fit for purpose and supports safe practice, for example, selecting intravenous infusion pumps with decision support tool functionality and inbuilt safety features to prevent drug errors.

PATIENT PATHWAYS AND EXPERIENCE AND ACCESS TO CARE

There is opportunity to increase our focus on the patient experience. This can be achieved through increasingly changing the focus of the health system to the consumer rather than the provider. We need to better utilise information on the experience of patients, educate consumers and clinicians to reduce unwanted variation in care, errors and investigations, and provide an important and meaningful measure of quality care.

We need to further develop our methods of public reporting to ensure transparency and to develop increased health literacy and consumer interest in health care.

There is an opportunity to better measure performance based on outcomes. Existing policy settings for performance measurement, for example WA Emergency Access Target (WEAT), are process measures as opposed to health outcome measures. As quantitative measures, they do not adequately differentiate between consumer need and priority. This incentivises a focus on moving the lower acuity patients through the system as opposed to a focus on patient outcomes.

There is a need for a greater focus on equity. This can be achieved by applying substantive equality principles to ensure greater investment in those at greater disadvantage (for example geographic, disability, language, cultural and socioeconomic), as is needed for people and communities with poorer health outcomes. Positively bias policy to ensure that the greatest support and assistance is provided to those in greatest need.

There is an opportunity to look at ‘Patient First’ as a whole of health initiative. A Patient First program could educate health consumers about the health care process and potential problems that can occur with their care so that they can be more active, involved and informed participants in their own care. This provides the patient with the ability to better self-manage their own health.

There is an opportunity to enhance this program through increased investment in implementing Patient First, for example, using ambassadors to provide information to patients about their rights and responsibilities. This might be achieved through volunteers or key staff who have undertaken appropriate training.

Consumer engagement and partnerships

- Strengthening investment in consumer engagement and education programs.

- Establishment of partnerships with consumers, which are maintained in a culturally appropriate manner.

Community responsibility

- Increased understanding of the broader socio-economic determinants that affect the health status of community members, and the contributors outside the health system requiring partnerships across agencies, with the community, and local government to achieve change.
- Recognition and awareness in the community that the incidence of chronic diseases in regional and remote areas can be exacerbated by the lack of access to affordable nutritious food, clean drinking water, and the availability of alcohol, sugary drinks and cheaper non-nutritious foods.

Joint community and regional based health service planning

- Joint community and regional-based health service planning (HSPs, funders and communities) is required to prevent duplication and gaps in services, to target services which address community health needs, and to optimise all available funding.

Access to specialist youth mental health beds and metropolitan services

- Provide continuity of care and improved access to services for country youth mental health patients by ensuring access to acute beds in metropolitan mental health facilities.

Access to services closer to home

There is significant opportunity to further analyse the synergy between PATS, telehealth services and visiting specialists to determine where service delivery focus provides the best results and where value and productivity can be improved.

Patient transport

Patient transport services are an essential service to all communities and critical to ensuring patients receive timely care in the right place. The need to transport patients to the right level of care is fundamental to a highly functional integrated health service operating within the delineation model of the CSF adopted by the WA health system.

The issues related to inter-hospital transport (IHPT) in WACHS regions are complex and costs are likely to continue to escalate with increased demand and population needs in regional areas. These issues are different from those in the metropolitan area with patients having to travel significant distances, and potentially with multiple providers such as Royal Flying Doctor Service and St John Ambulance before they reach their destination for definitive care.

Collaborative working across the WA health system

HSPs working more closely together with a shared responsibility and commitment to country consumers will improve safety, quality, access and the patients' experiences of care as they move through the complex healthcare system. We see opportunities to:

- Improve the currently unclear and inconsistent planned referral and return pathways and tertiary catchments for country patients.
- Implement Recommendation 22 of the 2017 *Review of Safety and Quality in the WA Health System*: *A Strategy for Continuous Improvement*[19] which proposed "Clinical support agreements between HSPs should be strengthened to support high quality and equitable service delivery across the WA geography".

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19 *Review of Safety and Quality in the WA health system - A strategy for continuous improvement*, Department of Health (2017).

- Ensure that patient pathways are formalised and do not rely on goodwill, and to ensure that accountability for country patients by metropolitan health services is incorporated into service agreements.
- System Manager to ensure substantive equality for country patients in terms of accessibility and access to high standards of care.
- System Manager to adjust the policy and purchasing framework to support outpatient reform including digital delivery and care closer to home.
- Build on the success of existing programs such as the WACHS Link inter-hospital patient transfer model which uses formal arrangements for patient transfer to improve service delivery and health outcomes.
- Address systemic issues for country people and clinicians when accessing or interacting with metropolitan health services, ensuring a patient is not refused treatment based on place of residence alone. Specialty, service level and a patient's prior history with a hospital all need to be considered in the allocation.
- Increase tertiary specialist support for country clinicians from metropolitan HSPs and ensure that visiting telehealth services and other collaborative arrangements are included in HSP service agreements.
- Improve the access and affordability of country patient accommodation in the metropolitan area.
- Address barriers to timely discharge for country patients from metropolitan hospitals including:
  - improving post discharge follow-up care provided by clinicians when country patients are repatriated to country hospitals
  - increased understanding of the availability and capacity of multi-disciplinary skilled follow-up at country hospitals or within regional non-admitted allied health services
  - limited sub-acute rehabilitation centres and services in country WA
  - access to timely inter-hospital patient transport.

FINANCIAL SUSTAINABILITY

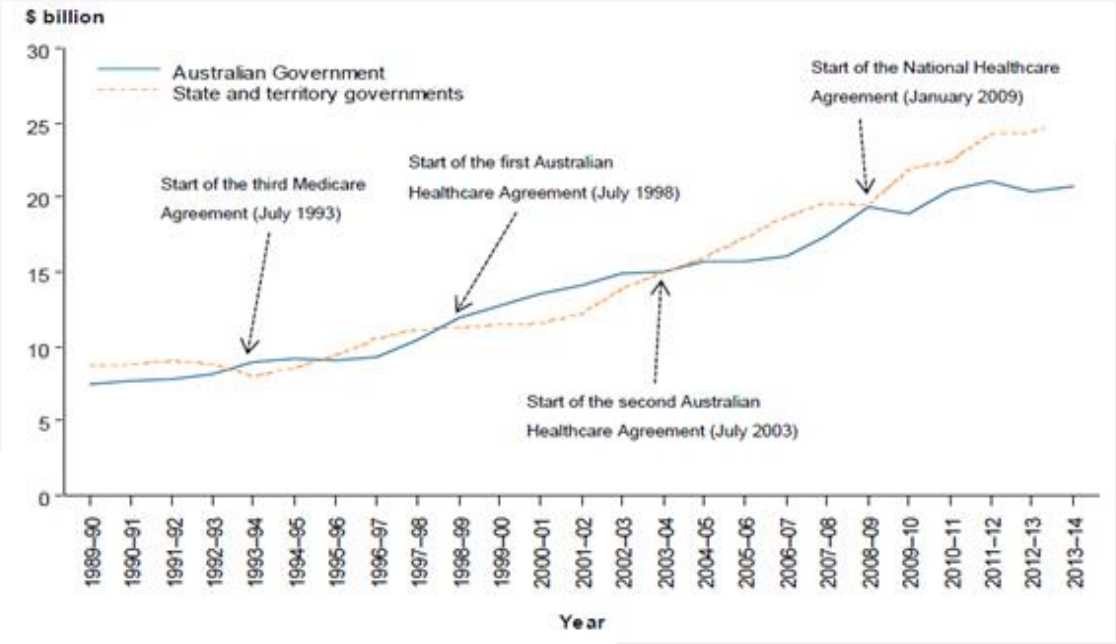
Commonwealth / State Policy and Funding

In Australia, the Commonwealth Government collects most of the taxes, but the States deliver most of the health care. The premise is that the Commonwealth funds the bulk of the health care system, subsiding primary care, pharmaceutical and residential care. The States, with Commonwealth financial assistance, fund and administer public hospitals, mental health and community care.

Figure 4 presents a graph from the Australian Institute of Health and Welfare (AIHW) [20], with data showing the proportion spend by stakeholders, and illustrates that State and Territory governments are increasingly shouldering more health costs with limited capacity to raise more revenue.

[20] AIHW - 25 Years of Health Expenditure Report No. 56 – 1989-90 to 2013-14 page 28.

Figure 4: Total hospitals expenditure, constant prices, by Australian Government and state and territory/ local governments, 1989–90 to 2013–14



In WA, the Under Treasurer Michael Barnes outlined in his *Economic and Fiscal Outlook* presentation in April 2017, that growth in WA health expenditure accounted for 56 per cent of the State's expenditure increase between 2013–14 and 2016–17, and now consumes over 30 per cent of the State budget[21].

Compounding this increase in expenditure is the lower per capita distribution of Commonwealth funding relating to Medicare benefits. It has been well established that WA has a GP shortage with only 77 GPs per 100,000 compared to the national average of 95. In addition to impacting on emergency department demand and hospital admissions, it is estimated that the shortfall in Medicare benefits is around $430M[22]. Similarly last year, per capita Pharmaceutical Benefit Scheme funding was $270 in WA compared with $332 nationally (approx.. $160m per annum), and aged-care funding was $585 in WA compared with $663 (approx.. $210m per annum). **This has resulted in approximately $800 million per annum underfunding from Commonwealth programs.**

WA has the lowest number of aged care beds per capita with an estimated shortage of more than 3000 places.

This maldistribution in health resource has been well established by State governments for many years however the underlying issues remain unchanged and it is unlikely there will be significant shifts to rebalance the national funding models for some years to come. Therefore it is important that WA engages the Commonwealth on funding reforms in the short to medium term with the aim of achieving a more equitable distribution of Commonwealth health funding being delivered to WA outside of the traditional pricing and funding mechanisms.

Negotiating bi-lateral agreements that provide increased supply side funding for specific areas such as primary care, aged care, health digital technology, chronic disease health care and health prevention will enable refocus of the state's health budget on core areas of responsibility.

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[21] Economic and Fiscal Outlook (6 April 2017), M Barnes, Under Treasurer (http://www.treasury.wa.gov.au/uploadedFiles/_Treasury/News/Economic-and-Fiscal-Outlook-6April2017.pdf)

[22] *WA missing out on $430 million annually due to GP shortage: Former Health Department head*, Emily PIESSE, ABC News (5 Aug. 2017) (http://www.abc.net.au/news/2017-08-05/kim-snowball-offers-health-advice-to-wa-government/8776100)

Funder integration and coordination

Significant inroads have been made in recent years to arrest the growth in health expenditure and put the WA health system on a financially sustainable path through a combination of leadership, governance and policy changes. Implementation of various short-term financial strategies has seen a turnaround in the WA health system's financial performance. Expenditure growth in 2015–16 and 2016–17 averaged 4.8 per cent, significantly lower than the historical average. When one-off and abnormal cost increases are excluded, WACHS expenditure grew by 3.7 per cent in 2016–17 and is forecast to grow by 2.4 per cent in 2017–18. However, WACHS health funding levels over 2017–18 to 2020–21 are only forecast to grow at an average rate of one per cent per year.

To ensure financial sustainability in this very tight fiscal environment, the following revenue, cost, patient demand and framework strategies should be considered.

The current market-based program funding from the Australian Government is not effective or efficient in rural areas. This leads to chronic underfunding and in some locations, over servicing. Where the market does not respond it leaves WACHS as a provider of last resort, usually for those services that are not financially sustainable for other providers.

The current system is very complex, with State and Commonwealth responsibility overlap creating significant duplication. There have been a number of reports that have highlighted the disaggregation of funding and fragmented services with limited service coordination being provided to Aboriginal communities, including the Productivity Commission's *Indigenous Expenditure Report 2014* (IER)[23] and the WA Government's *Location Based Expenditure Review 2014*[24], which looked at services delivered in Roebourne (including nearby Cheeditha and Mingullatharndo) and the Martu communities of Jigalong, Punmu, Parnngurr and Kunawarritji.

By way of example, the WA Government's review identified that in Roebourne alone in 2013–14, $53.6 million was spent servicing an Aboriginal population of 789 ($67,800 per person). There were 206 services delivered by 63 organisations, of which 17 providers delivered health services over 47 programs, valued at $11 million. These findings are consistent with the Productivity Commission's IER[25] for Western Australia which reported that the Australian Government and the State Government collectively provided $52,978 per Aboriginal person compared with $19,889 per non-Aboriginal person. Despite this expenditure, data from various sources, including the Australian government's *Closing the Gap - Prime Minister's Report 2017*[26], indicate the outcomes for Aboriginal people remain poor.

The current approach to resource allocation, fragmented service delivery, and inadequate coordination is not effective or efficient. In 2016–17, the WA State Government established the Regional Services Reform Unit to improve outcomes for Aboriginal people in regional and remote areas. In June 2017, the Federal Indigenous Health Minister Ken Wyatt also announced a new Network Funding Agreement of $20 million a year with the National Aboriginal Controlled Community Health Organisation to streamline the provision in health service support. The agreement provides the network with funding certainty, allowing organisations to undertake future planning, and improve their effectiveness.

The byzantine and disconnected multi-funder arrangements (with Commonwealth and State Governments primarily) are perfectly designed to deliver competitive, non-collaborative, fragmentation and duplication of some services on the ground.

It is essential that the WA health system participates in, and builds upon, these funding reforms. In the interest of improved patient care and financial sustainability, the health system should be simplified and responsibilities

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[23] 2014 Indigenous Expenditure Report, Steering Committee for the Review of Government Service Provision (December 2014)
[24] Location Based Expenditure Review 2014, Department of Premier and Cabinet (2014)
[25] 2014 Indigenous Expenditure Report, Steering Committee for the Review of Government Service Provision (December 2014)
[26] Closing the Gap – Prime Minister's Report 2017, Australian Government , Department of the Prime Minister and Cabinet, 14 February 2017

of providers clarified, similar to approaches in the NHS and New Zealand, where single purchaser/commissioning arrangements are established for some locations and population groups.

Revenue and funding models

The WA health system's funding and business models require further reform to promote innovation, provide incentives to reward delivery of lower cost services, recognise full cost of service delivery, supplement nonviable services provided by the State as the provider of last resort, and to encourage demand reduction including preventable hospital admission and lower cost primary care and community-based service.

- The funding model for non-hospital and non-ABF services is largely historically based. A more sophisticated model is required to ensure that non-hospital funding is sufficient and targeted to areas of need. Non-ABF services comprise approximately half of the WACHS budget given the substantial community and small hospital-based services provided. Non-ABF is often the subject of targeted efficiency and budget reductions from government. The funding model should better support investment in primary care, chronic disease and hospital avoidance to reduce hospital demand in the long term, and optimise health status of the community.
- WACHS is the provider of last resort for a range of services including aged care. WACHS continues to deliver some specific services at locations even when the funding model is not sustainable, for example WACHS provides RAC services at Port Hedland (Kalarra House) where the funding responsibility for this service rests with the Commonwealth. The facility operates with a deficit of approximately $3.5 million per year. This shortfall in funding should either be rectified by the Commonwealth or specifically recognised in State appropriations as a special allowance to guarantee service delivery and ensure sustainabillity.
- Current funding arrangements do not provide clear advantages or benefits to change models of service delivery. For example, the underlying ABF and fee-for-service arrangements reward volume growth in expensive inpatient services and does not encourage health service providers to actively manage demand downwards by providing enhanced community-based services. The funding model is based on outputs as opposed to outcomes.
- Similarly, the models inhibit innovation. Start-up funds are often required to initiate a material service or process improvement which may drive cost containment or increased revenue in the short, medium or long term. Budget allocations often do not have flexibility to support innovation and the business case approaches to government for additional funding are lengthy and time consuming.
- Productivity is a factor of labour productivity and capital investment. Labour productivity could be improved through targeted incentives (currently restricted through rigidity in the industrial relations system), better training, and facilitated by capital investment (investment in contemporary information systems to make better use of data, business intelligence systems and enhanced technology). Driving up productivity will invariably reduce unit costs in the longer term. Benchmarking of cost profiles for clinical and support services should become a standard and automated process.

Enable HSPs to reinvest budget savings to support innovation

- It is proposed that the funding models provide for WACHS to establish a Transformation Account from which it can fund its preventative and innovation-related strategies. Some of the issues identified in the Sustainable Health Review need initial seed funding or additional funding in order to initiate or progress. Through the creation of this account WACHS could generate a pool of funds from identified savings from changes in service delivery or from procurement savings, which can then be reinvested to fund some of these initiatives. This approach incentivises WACHS to drive the efficiencies allowing for funding of

strategies that will deliver longer term benefits to the community. This initiative would require the Department of Treasury and Government support for the creation of this account. Under the current funding model, any savings are returned to Government or used to offset budget deficits or overruns in other areas. This traditional approach does not provide an incentive for driving further efficiencies and reform.

Purchasing arrangements

- A new and more sophisticated purchasing framework is required which is evidenced based and targets resource investment to support service development and sustainability across patient cohorts and communities in need. The purchasing framework should enable equity of service access and health outcomes across the WA health system. Evidenced based and epidemiological data should be used in conjunction with service strategy to guide resource allocation across the system. It needs to encourage the development of innovative service models and not facilitate and reward increased activity in hospital settings.

Patient demand

- Improve access to, and provision of, primary care services, chronic disease management and hospital avoidance services. WA lags behind other states in the provision of primary care services in metropolitan and country areas. WA's lower levels of GP numbers per population (noted above) results in more ED attendances and an increase in preventable hospital admissions. Rural Health West estimates that the associated Medicare shortfall in country WA is in the order of $100 million[27].
- Expand consumer education programs to promote personal responsibility and engage communities in discussion on what they can reasonably expect from their health system. Increasingly change the focus of our health system to the consumer, rather than the provider, using information on the experience of patients.
- Review the effect of key price signals including Medicare use and application, WEAT and WA Elective Surgery Targets (WEST), no-cost attendance at EDs, and other factors that can influence levels of service demand.

Purchasing Frameworks

Notwithstanding the significant amount of money spent each year on health, national and state budget allocation and purchasing remains immature. Nearly half of the budget allocation for WACHS is based on historic allocations or bulk allocations for primary and non-acute services.

The ABF model is also very much demand driven with little incentive to reward demand management initiatives, alternative low cost treatments, hospital avoidance or safety and quality improvement to reduce re-admissions.

The pros and cons of the three basic payment systems are well known:

- Capitation offers control of cost but gives minimal performance and outcome measures, may lead to underutilisation or reduced accountability.
- Full salaried systems may create an on-the-job leisure problem and lack of accountability, but does offer cost control.

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[27] *WA missing out on $430 million annually due to GP shortage: Former Health Department head*, Emily PIESSE, ABC News (5 Aug. 2017) (http://www.abc.net.au/news/2017-08-05/kim-snowball-offers-health-advice-to-wa-government/8776100)

- Fee-for-service offers expenditure inflation in the absence of expenditure caps over-utilisation and activity data, which is not aligned to performance management.

The one size fits all approach has shown to be ineffective and inefficient, particularly in WA with such diverse and wide spread populations, complex health needs and service delivery challenges. No one system is likely to meet current and future needs and a more agile and flexible purchasing framework is required with purchasing decisions based on sound evidence, knowledge and service demand modelling.

Research and evaluating different approaches to health care arrangements is another priority issue. In the past, the poor uptake of existing research results, particularly in cases where research findings had negative implications for current practices or funding, has been influenced by professional bodies, where practitioners would simply dismiss the findings by questioning the validity of the data or research methodology used.

Future purchasing models need to be more sophisticated, based on good research evidence and better understanding of value and patient outcomes. More effort needs to be made on enhancing knowledge and gathering contemporary evidence about what needs to be purchased and what treatments offer little or no benefit and should not be purchased.

Purchasing models also need to include incentives to improve performance, manage demand or improve safety and quality measures. In the United States, funding organisations have commenced retaining a percentage of up to 30 per cent of the fee paid to health services as a 'value based or quality-based reimbursement. The value based payment is only made where set targets for low infection rates, re-admissions, adverse events and other measures are achieved. This change in funding is reported to be leading to considerable improvement in quality and efficiency by individual clinicians and health services[28]. Similar incentive models focused on quality and reduced duplication of services should be considered in WA.

PREVENTION, PROMOTION AND PARTNERSHIPS

WACHS believes that it can support better prevention, promotion and deliver better patient pathways and experience through strategies to protect and promote the health of the community, with greater focus on the early years, new models of care, and partnerships.

The health system is facing a growing burden of chronic conditions, an ageing population, continued health disparity between populations and inequitable access to primary health care. As a result, the financial demand on the State is projected to climb. The health system needs to deliver more efficient and better outcomes by preventing health conditions and disease through strategic effort, and reducing variation and duplication in testing and treatments.

There is a large body of research evidence which shows that social disadvantage, socioeconomic inequality and discrimination are associated with chronic stress resulting in early and rapid progression of chronic illnesses[29]. The majority of these social determinants of health are addressed by other (non-health) sectors and the health system needs to increasingly partner with agencies such as Education, Housing, Transport, local government and WA Police.

WACHS is a key provider of primary health care in country WA. In some very remote areas, WACHS is the sole provider. About 40 per cent (388,000) of the State's emergency presentations occur in country hospitals despite only 21 per cent of WA's population living in country WA. Over half of these are non-urgent presentations related to the lack of access to local GPs.

[28] https://www.ced.org/blog/entry/top-healthcare-stories-for-2016-pay-for-performance
[29] WA Aboriginal Health and Wellbeing Framework 2015–2030, Department of Health (2015)

Health outcomes are significantly poorer in country WA, particularly in the remote areas, with a higher prevalence of risky individual behaviours, including smoking and alcohol consumption as well as increased rates of sexually transmissible infections, youth suicide and potentially preventable hospitalisations.

In country WA, 10 per cent of the population is Aboriginal. Central to Aboriginal health and wellbeing is community, cultural and community connectedness, healthy environments, and support to strengthen cultural systems of care. The *WA Aboriginal Health and Wellbeing Framework 2015–2030*[30] is the overarching strategy guiding service delivery. Achieving good health outcomes for Aboriginal people is dependent on health services addressing systemic racism, recognising underlying intergenerational trauma and recognising culture as a protector and enabler.

Strategies to protect and promote the health of the WA community

- There is opportunity for increased partnership and collaboration across services and coordination of service delivery results. Partners include hospitals, GPs, Aboriginal Community Controlled Health Organisations (ACCHOs), non-government organisations (NGOs), visiting specialists, and private providers. Effective partnerships will also lead to improved health outcomes, wider choice for consumers, and a reduction in the use of inappropriate or unnecessary services.
- Improvements can be achieved through the development of standardised clinical pathways, treatments and care plans for health conditions.
- Integrated health records across public and NGO providers will avoid duplication and reduce unnecessary treatments.
- Enhanced technology can be used as a medium for health promotion and health education messages. Often people with health conditions want affirmation that health messages and treatments are appropriate and evidence-based. Use of supported chat rooms and virtual health education sessions are ways to provide health information to remote and isolated communities.
- Utilise telehealth to efficiently improve support for those with chronic disease in rural areas and post discharge, and to facilitate better communication between care providers and the client for example self-monitoring through a patient portal interface.
- Development of coordinated and linked models of care that are patient-centred will deliver more integrated health care. This should include follow up and support for patients post discharge from acute services to support better self-management and prevent or reduce re-presentations.

A greater focus on early years

There is clear evidence that the period from conception through the early years of a child's life provides the foundation for lifelong physical, social and emotional wellbeing[31][32][33][34][35]. Many chronic health problems in adulthood, such as obesity, heart disease, diabetes and mental health problems have their origins in early

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[30] WA Aboriginal Health and Wellbeing Framework 2015–2030, Department of Health (2015)

[31] Shonkoff JP and Phillips DA (editors), Committee on Integrating the Science of Early Childhood Development, Board of Children, Youth and Families, 2000. *From Neurons to Neighborhoods: The Science of Early Childhood Development*. Washington, DC: The National Academies Press

[32] Center on the Developing Child at Harvard University, 2007. A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes, Behaviour and Health for Vulnerable Children. www.developingchild.harvard.edu

[33] Heckman JJ. The Case for Investing in Disadvantaged Young Children. Big Ideas for Children: Investing in Our Nation's Future. First Focus, 2008, Washington DC

[34] Maggi S, Irwin LJ, Siddiqi A and Hertzman C. The social determinants of early children development: An Overview. Journal of Paediatrics and Child Health. 2010 (46): 627-635

[35] Engle PL, Fernald LCH, Alderman H, Buhrmann J, O'Gara C, Yousafzai A, De Mello MC, Hidrobo M, Ulkuer N, Ertem I and Iltus S. Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *Lancet* 2011; 378:1339-53

childhood. Economic analysis shows that programs aimed at alleviating disadvantage during the early years of life are both effective for improving child outcomes and yield higher returns on investment than remedial interventions later in life.

Children and young people aged 0 to 19 comprise 26 per cent of the total population in regional WA. A higher proportion are disadvantaged compared with those of the same age living in the Perth metropolitan area. More reside in lower socioeconomic areas and/or remote locations, and more receive their health care from the public health system. Children and young people in regional WA are more likely to have a notifiable disease, a mental health condition and to be hospitalised due to injury or poisoning. They have greater attendance at EDs and are subject to more preventable hospitalisations and avoidable deaths[36]. Aboriginal children and young people make up 17 per cent of the WA regional population compared with three per cent in metropolitan Perth. This group continues to experience significant disadvantage in health and development, with many diagnosed with preventable or treatable health conditions.

The *WACHS Child and Maternal Health Profile*[37] presents an overview of the health of children and young people aged 0–19 and birthing mothers living in WACHS regions to support evidence-based planning and review of health services for these groups (illustrated in Appendix 1).

Family environments are major predictors of many life outcomes and child and family health services present an important point of intervention for trajectories of poor health and development outcomes to be disrupted[38][39][40][41][42][43]. These services are best delivered within a framework of progressive (proportionate) universalism, with extra effort directed to ensuring services are accessible to, and inclusive of, the most vulnerable and disadvantaged. A universal service does not stigmatise those who need more, experiencing significant issues, or are marginalised. Such services provide a strong platform for identifying, prioritising and tailoring services for disadvantaged children and families[44]. A family partnership approach is most effective to support disadvantaged families through early, intensive and tailored support to build parenting skills, enhance child-parent attachment and to intervene early for child health and developmental concerns[45][46]. The WACHS Country Kids Program is an integrated child health and development service strategy structured around seven key objectives working with both WACHS employed and contracted staff to:

- Develop services and programs for Aboriginal children in remote and very remote communities that address their health and developmental needs.

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36 WA Country Health Services, 2017. Child and Maternal Health Profile. WACHS, Perth

37 WA Country Health Services, 2017. Child and Maternal Health Profile. WACHS, Perth

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39 Heckman JJ. The Case for Investing in Disadvantaged Young Children. Big Ideas for Children: Investing in Our Nation's Future. First Focus, 2008, Washington DC

40 Maggi S, Irwin LJ, Siddiqi A and Hertzman C. The social determinants of early children development: An Overview. Journal of Paediatrics and Child Health. 2010 (46): 627-635

41 Engle PL, Fernald LCH, Alderman H, Buhrmann J, O'Gara C, Yousafzai A, De Mello MC, Hidrobo M, Ulkuer N, Ertem I and Iltus S. Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *Lancet* 2011; 378:1339-53

42 World Health Organization, Commission on Social Determinants of Health, Final Report. Closing the Gap in a Generation: Health equity through actions on the social determinants of health. 2008, WHO, Geneva

43 Rossiter C, Fowler C, Hopwood N, Lee A and Dunston R. Working in partnership with vulnerable families: the experience of child and family health practitioners. Australian Journal of Primary Health, 2011;17(4): 378-83

44 Oberklaid F, Baird G, Blair M, Melhuish E and Hall S. Children's health and development approaches to early identification and intervention. Archives Dis Child, 2013; 98: 1008-11

45 Oberklaid F, Baird G, Blair M, Melhuish E and Hall S. Children's health and development approaches to early identification and intervention. Archives Dis Child, 2013; 98: 1008-11

46 Keatinge D, Fowler C and Briggs C. Evaluation the Family Partnership Model (FPM) program and implementation in practice in New South Wales, Australia. Australian Journal of Advanced Nursing, 2007; 25(2): 28-35

- Develop consistent clinical pathways to address developmental issues and health conditions (such as ear disease, growth faltering, developmental delay, obesity and anaemia).
- Implement strategies to engage vulnerable families.
- Strengthen and further develop partnerships and interagency collaboration with other family and health service providers and stakeholders.
- Integrate hospital and community based-care, including where hospital care is provided in metropolitan or larger regional centres.
- Strengthen the integration between assessment, screening, referral and intervention services.
- Strengthen child health promotion support and activities to raise awareness with parents and other carers.

Currently, key issues for WACHS child health and development services are a lack of connected and appropriate clinical information systems, and a lack of integration and coordination between hospital and community-based child health and development services, especially for children with complex health and developmental needs.

There is increased opportunity to:

- Increase the provision of quality universal child health services. This includes regular health assessments, early identification, intervention and treatment of health issues for all children and their families beginning in the antenatal period, with extra effort directed to ensuring services are accessible to, and inclusive of, the most vulnerable and disadvantaged.
- Provide targeted early intervention supports for families who have a child identified with developmental issues or delay. Child developmental services provided to families aims to strengthen family and community capacity to support the child's development and/or health needs.
- Deliver early and intensive home visiting services by skilled professionals to reach the most disadvantaged families from birth or antenatal.
- Continue and strengthen investment in child health programs, such as those that address anaemia, skin conditions, ear health, rheumatic heart disease, respiratory disease and those that strengthen parenting skills and families, to prevent poor health and social outcomes, as well as avoidable expenditure. As an example, preventable hearing loss has lifelong and intergenerational implications for children, families, communities and governments. In 2010, 94 per cent of Aboriginal inmates tested in two Northern Territory (NT) prisons had significant hearing loss[47].

New models of care are needed to address GP shortages in rural and remote settings

- Providing community based, nurse-led models of care in local communities, where access to treatment and follow-up is normally only accessible through a primary care provider (GP) is recommended. This avoids people having to travel long distances to access services. Changes to legislation may be required to ensure suitably qualified child health nurses can provide treatment such as prescribing antibiotics for ear disease in childhood and ordering iron injections for childhood anaemia.

[47] *Most Indigenous inmates suffer hearing loss*, Sarah DINGLE, ABC News (15 July. 2011) (http://www.abc.net.au/news/2011-07-15/major-hearing-problems-among-indigenous-inmates/2796230)

- Provision of community-based multidisciplinary teams to improve the management of complex and chronic conditions, and reduce the need for unnecessary hospital presentations is also recommended.

New models of partnerships

The WA health system needs to make use of all available resources by working in partnership with GPs, ACCHOs, local, non-government and other private providers to build an integrated consumer and community focused country health system. Existing processes are already in place such as regional Aboriginal Health Planning Forums. Formal processes that have clear governance arrangements should be developed. Examples include:

- In the NT, a formal Memorandum of Understanding between the NT Health and Aboriginal Medical Service Alliance Northern Territory provides the foundation for standardised clinical pathways and care plans for children with health conditions. Similar agreements could be developed for all age groups and a range of health conditions.
- WACHS purchases child health, school health and child development services from ACCHOs, NGOs and private providers. This could be further expanded to other health services.
- Partnerships with ACCHOs should be strengthened with the ACCHO taking control in the provision of health care in Aboriginal communities. To support this strategy there will be a need for an increased and sustainable Aboriginal primary healthcare workforce through development and promotion of training programs for Aboriginal Health Practitioners.

Health promotion strategies

WACHS partners with a range of stakeholders to deliver health promotion activity throughout country WA. Comprehensive health promotion programs are a key component in disease and injury prevention, and while there have been improvements in a number of risk factors, such as prevalence of smoking and a decline in the consumption of alcohol at risky levels, there are challenges to maintaining health gains. Maximising the effectiveness of the health promotion effort by the WA health system could be achieved by:

- Reducing duplication in health promotion activity. Currently there are a number of NGOs and local government authorities involved in the delivery of similar health promotion activities to WACHS in communities across country WA.
- Aligning the activity of health promotion staff employed by the WA health system with the organisation's priority areas through engagement in joint service planning. This alignment will drive integration, coordination, decrease duplication of services and address service gaps.

DIGITAL, INNOVATION AND RESEARCH

WACHS believes that it can improve sustainability through a focus on adaptive, agile technology, digital advances, innovation and research, mobile digital information solutions, clinical and corporate data integration and a focus on research.

Research and Economic Analysis

Access to reliable information and research is a prerequisite for an efficient and effective health care system. Despite recent lower growth in health spending, the WA health system's share of GDP has continued to rise from 10.0 per cent in 2014–15 to 10.3 per cent in 2015–16[48]. This trend is expected to worsen through aging

[48] Productivity Commission - Report on government services 2017, volume E: Health - https://www.pc.gov.au/research/ongoing/report-on-government-services/2017/health/rogs-2017-volumee.pdf

population, high cost of medical technology and individual affordability. One projection of expenditure trends is that the Australian Government's spending alone will increase from 4.2 per cent of the Gross Domestic Product (GDP) in 2014-15 to 5.7 per cent in 2054-55 (or $260 billion in current dollars – *Australian Treasury 2015*). Yet research in the health sector has predominantly focused on medical and clinical research with rigorous research and economic analysis on health care and delivery models being ignored.

It is ironic that with healthcare being the largest consumer of GDP, there isn't a stronger focus and investment on economic research and analysis. Healthcare providers should be able to rely upon contemporary and informed research to guide decisions to make healthcare more sustainable, and to guide how to best use scarce healthcare resources to greatest benefit.

Health policy and investment decisions must be able to rely on good evidence and economic analysis with evidence-based policy making at the heart of decision making on health reform. Without evidence, policy makers are at risk of making decisions based on intuition, ideology, conventional wisdom or, at best, theory alone.

Information is typically published about the likely effects of health care reform, but systematic evaluation of such changes and trials is essential if the knowledge and ability to make well informed future decisions is to improve.

- A research strategy, underpinned by adequate resourcing, partnerships with research institutions and clear direction is required to improve our understanding and translation of evidence into future practice.
- With the level of current and future investment in health care required, we can no longer afford to have unanswered questions about where best to invest our health dollars and be able to demonstrate and defend where funding needs to be withdrawn due to low health benefits or alternative better ways of delivering care.

Digital innovation

Country communities and clinicians believe that health outcomes are enhanced when care is provided closer to home for country patients due to local and family support and the ability to remain 'on country' for Aboriginal patients. Country people face barriers in accessing services relating to distance, transport, service schedules and cost of access. Although it can be argued country communities have the most to gain from technology investment, they have typically been behind urban centres in being provided with core technology capability.

Technology is moving at an unprecedented rate of change. Consumer behaviour in adapting and leveraging new technology opportunities far outpaces that of professional healthcare workforces. Traditionally, the approach, pace and cost of technology in health is constrained by a centralised effort to design and deliver one-size-fits-all solutions. The complexity in scale and scope of business need means that delivery at this level can only occur in silos of capability that are not fully integrated across the diverse continuum of care and contexts.

- A review of the WA health system IT system architecture is needed to move to an agile, adaptive, standards-based modern framework that is aligned to a clear WA health system e-Health digital strategy.
- The strategy needs to set as a priority the foundations for a comprehensive EHR as a single source of patient and administrative information that provides a holistic view of patients' past, present and future healthcare journey. This would reduce fragmentation of the patient medical record across both a digital and physical hybrid state that carries significant cost, inefficiency and clinical risks to maintain.

Adaptive, agile technology estate

- A digital strategy and framework needs to focus on delivering technology into the business that is adaptive, modern, standards-based, coupled with a decentralised delivery platform utilising infrastructure

as a service. This approach enables providers to adapt and innovate in the use of technologies and modalities that meet the challenges of delivering healthcare in a range of contexts, without compromising governance, interoperability, value and security.

- Both Queensland and NSW Health have utilised adaptive, agile digital toolkits incorporating mobile social media platforms that appeal to young Aboriginal people, to deliver highly effective, primary health programs around smoking and sexual health that importantly do not "feel like health, but feel like socialising". Early engagement with Aboriginal youth can break down inter-generational cycles of poor health outcomes and disadvantage through subtle, consumer driven platforms and technologies.

Real time, mobile digital information and knowledge for care professionals and carers

- A prerequisite for sustainable health care is increased delivery of care within a community setting. This requires a different way of working that is dependent on a more mobile, technically-enabled workforce. Mobile technology supports the health service to provide patient self-care, access to expertise and health advice through virtual consultation services and decision support tools. Capture of data in real-time through mobile platforms enables point-of-care support and feedback to clinicians in situ to evaluate, innovate and improve their delivery of care. Convergence of wearable medical devices and telemetry for patient monitoring incorporated into this mobile technology estate, further supports telemedicine and virtual delivery of ongoing care, monitoring and patient support across enormous distances.
- Telehealth is a key strategic initiative and opportunity for WACHS. It has capacity to expand to all aspects of acute, non-admitted and primary health care service delivery. The speed of consumer driven smart phone and mobile device technology evolution, along with investment in regional networks through the National Broadband Network and WA Government Chief Information Office initiatives set a future stage of mobile information access opportunity that is unprecedented. To act on this multi-generational opportunity, suitable funding frameworks will be required to directly support technology investment, evaluation, innovation and maintenance across government. Though there is the move toward a consumption based 'operating budget' model within health, there is currently no dedicated capital funding or designated operating funds to support the people and technology transition to a mobile, integrated, distributed digital provider of healthcare.
- There are significant challenges associated with progressing innovative solutions in the more remote and regional areas when relying on existing technology infrastructure. Technology innovation and take-up is limited in areas where it is most needed. Innovations such as telemetry cardiac monitoring rely on reliable access to information and communications technology.
- Embracing mobile technologies will enhance patient outcomes, increase staff productivity, reduce delays to accessing care, and eliminated duplication of effort.

Interoperability of clinical and corporate data to drive enterprise resource management and planning

- Health care not only tends to develop clinical technology solutions in silos across the continuum of care, but does so in isolation from corporate systems involved in managing financial and human resources. By actively developing a data lineage that connects the management of enterprise resources with the patient and their care, improvements in resource management, future costs based on demand for services and inefficiencies can be identified in real time. By developing an EHR integrated with corporate systems under an enterprise resource planning technology platform, enormous opportunities to be innovative in resource utilisation and respond to demand will be realised.

Cognitive data integration

- Health care represents one of the greatest opportunities to benefit from cognitive data technologies due to the complexity and volume of available information. By ensuring the single source of information (EHR)

is accessible for consumption by machine learning and artificial intelligence technologies, profound opportunities to build knowledge, insight and wisdom around the delivery of health care can be developed. Without forethought of how our future technology estate will allow us to realise data as an asset for investment in the digital information age, the WA health system will isolate itself from the profound opportunities of the data revolution.

Research in Country WA

As indicated earlier, R&D is recognised as a key enabler to change the way services are delivered and inform future strategic investment in health services that will deliver the greatest returns in terms of healthcare sustainability and health outcomes. Country communities with defined geographic boundaries, smaller scale, diverse cultures and health needs provide unique opportunities to research and develop innovative healthcare models, particularly in challenging areas such as Aboriginal health, mental health and chronic disease management.

- Opportunities exist to work with R&D organisations and seek national funding for research. A WA health system R&D strategy is required that defines the priorities areas, actively seeks resources and formally partners with R&D organisations to leverage the required skills and professional support.
- The development of research priorities must be informed by the communities served by WACHS and by the health care workers who provide them with health care. Healthcare workers conducting research in regional and remote locations require support and mentoring. This will be achieved by education, support and resources, and by collaboration with research institutions and experienced researchers. This shift will ensure country communities directly benefit from the research as the latest evidence-based practice is used in treating country patients.

Currently, the largest proportion of research at WACHS occurs in the Kimberley region directly or indirectly involving Aboriginal participants and their communities.

- WACHS is seeking to build stronger links with research institutions which will ensure that country communities benefit from advances elsewhere and that research projects build on work done in rural and remote healthcare nationally and internationally.

WORKFORCE AND CULTURE

Having access to a reliable supply of health professionals within regional and remote areas is a significant challenge for country communities. The ability for WACHS to attract and retain clinicians with specialist skills can be the sole determinant of whether a service can be delivered within a regional location, requiring alternative solutions often at high costs, including engaging clinicians on a 'fly in-fly out' basis, utilising high-cost agency staff or international recruitment. The over-reliance on these temporary resourcing models can create significant instability and lack of continuity of care. WACHS has sought to stabilise resourcing where possible through permanent appointments and the use of alternative advertising and recruitment strategies, however, this continues to be a constant challenge. Turnover rates in WACHS regions vary greatly with the Pilbara and Kimberley averaging between 25 per cent and 42 per cent annually[49].

WACHS is challenged by limited supply of a specialist workforce. WACHS has limited influence on teaching and training for health professionals which can result in health graduates being considered ill equipped to work in rural, remote or primary health care settings. Opportunities exist for WACHS to have more input into the development of the workforce and to influence the outcomes of workforce supply.

[49] Lattice database (data extracted 2014)

Development of a State strategy for vocational training, including allocation of vocational training places and locations, could improve the ability for WACHS to engage staff from within local communities or address skills required in remote and rural settings. Limited access to healthcare training programs (tertiary and vocational) in regional locations results in prospective healthcare professionals having to leave their towns to train in healthcare, which limits the supply available in regional locations.

The engagement of Aboriginal staff to work in regional health care is critical to increase culturally secure access to services by the remote and regional Aboriginal population. Aboriginal patients are more likely to access health care where an Aboriginal Health Worker (AHW) is available.

Opportunities that exist include:

- Challenge educational institutions to deliver localised training and education to improve the uptake of Aboriginal people into the workforce.
- Policy change is required at a national level to provide the health system with greater control over training places to ensure sufficient supply of medical practitioners to address current and future need. There is significant under-investment in training places resulting in an undersupply of experienced and trained doctors available to the health system.
- Develop collaborative partnerships between health and local private/not-for-profit organisations for the provision of services. This would enhance delivery of services broadly across the health sector and particularly in country and remote locations.
- Monitor and seek to influence visa policies which affect WACHS's ability to ensure a continuous and appropriate supply of skilled workforce.
- Develop partnerships with selected education and training bodies to minimise the cost and increase effectiveness of the training provided across WACHS.
- Develop a modern, integrated Human Resource Management information system that will assist managers and employees to improve productivity, provide employee self-service options, reduce payroll administration errors, support good Human Resource practice, and integrate with related functions of Work Health and Safety, scheduling/rostering, learning and development, performance development, maintenance of job descriptions and analytics/metrics systems.

Liveability and maldistribution of the workforce

The liveability of regions can be a barrier to attracting people to work in country areas. There can be challenges in providing peer support and optimal clinical standards. People living in country areas can experience limited access to educational institutions, schooling for children, and housing affordability. All can be deterrents for people to consider a rural or remote appointment.

Challenges can arise in providing reassurance to staff working in rural and remote locations in regard to managing violence and aggressive situations in the workplace and community, and this can impact on retention and staff wellbeing. Health and sector-wide multi-faceted strategic approaches are required to collaboratively address staff concerns and enhance mechanisms to reduce risk. This can be achieved by improving security support, clearly identifying and understanding risk, involving family members in the development of patient care plans, ensuring incidents are acted upon, redesigning workplaces to prevent violence, providing education and training to staff, and integrating legislation, policies and procedures in a statewide approach.

Inflexible productivity and labour instruments can create workforce dissatisfaction. Some examples include:

- The current AHW Agreement in WA provides less benefits and conditions than other health professional agreements. Aboriginal people commence on the AHW Agreement but often do not continue, moving to other health services to access improved training, benefits and conditions.

- Some college terms and conditions (such as specified minimum on-call arrangements) can add operational challenge in rural and remote areas, impacting on efficiency.
- Elements of restrictive legislation, policy and practice present challenges that can impact on financial sustainability when seeking to:
  - compete with the private sector for talent (impacting the ability to recruit in a timely manner and offer competitive remuneration and incentives for people to relocate to a regional area)
  - develop employees through succession planning
  - provide incentives for good performance that delivers workforce outcomes against key performance indicators
  - provide appropriate housing as an attraction incentive to staff residing in a region
  - offer incentives for staff to work in regional and remote locations (agency staff costs exceed the cost of permanent/fixed term contract staffing costs). This has related increased costs and reliance on "Fly-In-Fly-Out" models to provide continuity of services
  - AHW appointments are mainly tied to funded positions, rather than being a permanent and integrated core component of the WACHS workforce.

Workforce skills challenges

- There is a need to broaden existing, and develop new boundaries for scope of practice skills between occupational groups for rural and remote areas. For example, enrolled nurses have an established development structure to broaden their skills, but are not able GPto fully practice these skills in all cases. Nurse practitioners' scope of practice extension to further specialty areas may reduce the need for GP attendance where these services are not available.
- Challenges exist in providing education and opportunities for professional development to such a geographically dispersed and varied workforce. Partnerships with selected education and training bodies seeking to minimise cost and increase effectiveness of the training provided across WACHS could enhance service delivery and career development opportunities for staff.
- There are ongoing challenges in the recruitment of senior clinical allied health professionals in country areas. While there are many clinical professions and disciplines where there is sufficient workforce supply of trained professionals (medical, nursing and allied health) across the system, however a key issue for country sites is the maldistribution of the clinical workforce between metropolitan and country locations. Further support and investment is required at a State level to identify and deploy levers and incentives on a state-wide basis to assist with not only the training of new clinicians, but also to deliver a redistribution of the existing workforce to more equitably serve remote and regional WA.
- There is an increased number of Australian medical school graduates requiring intern places, with subsequent need for investment in post-graduate medical education and regional support to ensure high quality care.
- An increased focus is required on the recruitment and retention of Aboriginal mental health workers due to the short-term nature of funding for specialised Aboriginal mental health services.

Appendix 1: Key health issues for WACHS children and youth (aged 0–19 years)[50]

WACHS Population*
(2015)
546, 198

Children (0 -19 years)
142, 057
(26%)

Childhood obesity
(aged 5 - 15)
HWSS** 2008-2013

17% **(WACHS)**
Kids classified as overweight

15% **(Perth Metro)**
Kids classified as overweight

5 serves a day
Not enough veggies
(2010 - 2015)

91% **(WACHS)**
Kids don't eat enough veggies

93% **(Perth Metro)**
Kids don't eat enough veggies

Teenage Births (2014/15)
less than 18 years

7%
among Aboriginal women

1%
among Non-Aboriginal women

Smoking in pregnancy
(2014/15)

49%
among Aboriginal women

12%
among Non-Aboriginal women

Leaving education
before age of 15 years
(2014)

11% **(WACHS)**

8% **(Perth Metro)**

Emergency attendance
(2010 - 2014)

1.9 times
higher in WACHS children and youth than the State rate

Potentially Preventable Hospitalisations
(WACHS 2010 - 14)

2.8 times
higher in Aboriginal children than their Non-Aboriginal counterparts

Oral health
aged 0 - 9 years
(WACHS 2010 - 14)

2.8 times
higher admission rate for a dental condition in Aboriginal children compared with Non-Aboriginal children

Mortality rate
in children aged 0 - 19 years

1.5 times
higher in WACHS than the State rate

380
DEATHS
(2009 -2013)
in children and youth in WACHS

Transport accidents
(2009-2013)
are the leading cause of avoidable deaths
68
DEATHS

* Estimated Resident Population (ERP)
** WA Health and Wellbeing Surveillance System

[50] *Child and Maternal Health Profile - WA Country Health Service*, WACHS Planning and Evaluation Unit (April 2017)