Protocol for Aboriginal Chronic Disease

Risk Factor Assessment and Screening
ACKNOWLEDGMENT OF COUNTRY

The South Australian Aboriginal Chronic Disease Consortium acknowledges and celebrates that Aboriginal and Torres Strait Islander people are the Traditional Custodians of the land, known as Australia.

We recognise that Aboriginal and Torres Strait Islander people are the First Peoples of Australia and that within these two distinct cultural groups, there is great cultural diversity.

We acknowledge and pay our respects to the Aboriginal people across South Australia, Elders, past and present, their continuing connection to this land and thriving cultural practices and knowledge.
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Aboriginal Chronic Disease Risk Factor Assessment and Screening for Adults Protocol

Rationale

The South Australian Aboriginal Chronic Disease Consortium is committed to reducing the impact of chronic disease experienced by Aboriginal and Torres Strait Islander people living in South Australia.

A system-wide, consistent and high-quality approach to Aboriginal chronic disease risk factor assessment and screening is an important strategy under the “Prevention and Early Detection” priority action area of the Consortium’s Road Map for Action that spans all chronic diseases, including diabetes, cancer, heart disease and stroke.

Consortium members commit to a comprehensive approach to assessing and screening for chronic disease risk factors in Aboriginal adults, and they endorse the clinical items and requirements outlined in this document. These have been developed collaboratively by a range of clinical experts.

Consortium members also commit to the cultural attributes and principles that underpin a high-quality approach to chronic disease risk factor assessment and screening for Aboriginal people. These attributes have been developed under the leadership of the Consortium’s Aboriginal Community Reference Group.

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SA ABORIGINAL CHRONIC DISEASE CONSORTIUM

Government of South Australia
SA Health
Purpose of the protocol

The Aboriginal Chronic Disease Risk Factor Assessment and Screening Protocol is a resource to provide clinical and cultural guidance for health service providers across a broad spectrum of clinical professions in the primary and acute health care systems in South Australia, to enable the provision of consistent, high-quality chronic disease prevention and early detection. The Protocol can also inform health service planning, policy development, funding decisions and health service accountability and quality control.

The protocol guides the provision of health checks, typically a Health Assessment for Aboriginal and Torres Strait Islander People (MBS item 715) or a similar health assessment undertaken by service providers who are not eligible for a rebate through the Medicare Benefits Schedule. The protocol also outlines the elements required to screen for specific risk factor related to diabetes, various cancers, heart disease and stroke.

How to use the protocol

Clinical staff, including (but not limited to) General Practitioners, medical specialists, nursing staff, allied health professionals, Aboriginal Health Workers and Practitioners and clinic and/or practice managers, are required to undertake the elements outlined in this protocol to undertake a comprehensive approach to identifying chronic disease risk factors in Aboriginal adults.

The standards outlined in this agreement are informed by the National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people (3rd edn.)¹, jointly published by the Royal Australian College of General Practitioners (RACGP) and the National Aboriginal Community Controlled Health Organisation (NACCHO), the Central Australian Rural Practitioners Association (CARPA) Standard Treatment Manual (7th edn.)² and the RACGP Standards for General Practices (5th edn.)³. The standards outlined in this protocol are also aligned with the Australian Government, Department of Health Medicare Benefits Schedule. Other guidelines and standards for chronic disease risk factor assessment and screening, including disease-specific resources, are referenced in this document. Health service providers are encouraged to consult these resources for more detailed guidance as required.

A comprehensive assessment of chronic disease risk factors as outlined in this protocol requires a substantial time commitment of health service providers as well as the Aboriginal person. Appropriate operational procedures, including referral processes, are critical to enable and support the comprehensive approached outlined in this document.

Disclaimer

Reference to Aboriginal people is made inclusive of the Torres Strait Islander population in South Australia.

Background

The burden of chronic disease

Aboriginal people in South Australia experience a significantly higher burden of chronic disease which contributes to the gap in life expectancy between Aboriginal and non-Aboriginal people of 10.6 years and 9.5 years for men and women respectively. Aboriginal people also experience higher levels of co-morbidities associated with chronic disease.

Deaths from cardiovascular disease, by Aboriginal status and age, SA 2006-2012
Prevalence (%) of Type II Diabetes in SA (persons 18yrs & older, age standardised) by Indigenous Status & Sex 2011-13

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<thead>
<tr>
<th></th>
<th>Aboriginal</th>
<th>Non-Indigenous</th>
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<tbody>
<tr>
<td>Males</td>
<td>12.0%</td>
<td>14.0%</td>
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<tr>
<td>Females</td>
<td>16.0%</td>
<td>10.0%</td>
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<tr>
<td>Persons</td>
<td>10.0%</td>
<td>8.0%</td>
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Age at cancer diagnosis in South Australia

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<th>Age Group at Diagnosis</th>
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Uptake of health checks

Health checks are an important tool for the prevention and early detection of chronic disease and associated risk factors; however, the uptake of health checks in South Australia is low. In 2016, the usage rate of health checks (MBS 715) in South Australia was 18.8% across all age groups with the lowest rates (14%) in the 15-24 years age group and the highest (32.2%) in the over 65 years age group. Uptake of health checks in 2015-16 was lower in the Adelaide Primary Health Network catchment area (12.9%) compared to 27.9% in country South Australia. Jurisdictional data shows a significantly higher uptake of health checks in Queensland, where the uptake of health checks is significantly higher.

Please note that state-funded Aboriginal health services such as the Watto Purrrunna Aboriginal Primary Health Care Service provide health checks but are not eligible for rebates under the Medicare Benefits Scheme. These health checks are therefore not captured in the data below.

Quality and consistency of health checks

The Medicare Benefits Schedule (MBS) defines a health check (item 715) as “assessment of a patient’s health and physical, psychological and social function and consideration of whether preventive health care and education should be offered to the patient, to improve that patient’s health and physical, psychological and social function”. Provision of a health check involves taking a patient’s history and examinations as required to make an overall assessment, and it includes recommending appropriate intervention and providing information and advice.

Aboriginal community have provided anecdotal evidence that the quality of health checks can vary significantly, and that there is no consistent approach to undertaking health checks. This protocol document builds on existing guidelines, as referenced above, to provide further directions on the provision of high-quality health checks for the prevention and early detection of chronic disease and associated risk factors.

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Cultural attributes and principles

Health service providers need to consider the unique and diverse cultures of Aboriginal people, and they need to tailor their interaction and communication to overcome any cultural differences and barriers that may exist, for example language barriers, gender-specific sensitivities or a different approach to family and kinship structures. In addition, it is also important to recognise social determinants of health and the impact of colonisation and past and current government policy which greatly impact Aboriginal communities and shape the health outcomes of Aboriginal people today.

The Consortium’s Community Reference Group highlights the importance of the service attributes and principles that must underpin the delivery of chronic disease risk factor assessment and screening for Aboriginal people. These are aligned to the National Safety and Quality Health Service Standards, User guide for Aboriginal and Torres Strait Islander Health and the Standards for General Practices. The information below outlines areas of consideration; however, a deeper understanding of these complexities is required to enable health service providers to develop the skills (especially communication skills), knowledge and awareness that are required to provide an accessible and safe service to Aboriginal people.

1. Identification of Aboriginal and/or Torres Strait Islander background

Identifying a person’s Aboriginal and/or Torres Strait Islander background is critical for the provision of a high-quality service, and it has a range of tangible, systematic benefits such as MBS rebate eligibility for the health service and the collection of data that informs Aboriginal health policy development, service planning, monitoring of health system performance and Aboriginal health outcomes and advocacy. Identification is also required for the benefit of the person who receives a service because it enables the health professional to meet the clinical and cultural needs of an Aboriginal person.

Aboriginal people have diverse and unique backgrounds, and their identity is often closely related to their communities and their country. Health service providers are encouraged to ask Aboriginal people about their community background or engage in a conversation about their country, as it demonstrates a level of cultural awareness and can help building relationships and trust between the health professional and the patient.

6 Wardliparingga Aboriginal Research Unit of the South Australian Health and Medical Research Institute (2017), National Safety and Quality Health Service Standards, User guide for Aboriginal and Torres Strait Islander Health, Sydney: Australian Commission on Safety And Quality in Health Care.

2. A culturally safe and welcoming environment

Aboriginal people are likely to experience racism in various aspects of life, and it is important that a health service is provided in an environment that enables Aboriginal people to feel safe, comfortable, accepted, and confident that they will be respected, will be listened to and will receive high-quality care. A culturally safe and welcoming environment is characterised through physical aspects (for example the display of an Aboriginal flag and/or Aboriginal art work, and the availability of Aboriginal-specific health promotion and information resources, access to interpreter services and traditional healers), and through an Aboriginal person's interaction with service personnel, including health service providers and other staff within the service. It is, for example, important that staff establish a rapport with clients at current presentation and into the future.

It is likely that Aboriginal patients are accompanied by family members or carers that may accompany the client. Consideration also needs to be given to gender related sensitivities and every effort should be made to ensure that Aboriginal men receive a service from male staff and women receive a service from female staff.

3. Cultural awareness and cultural safety and security

The assessment and discussion of potentially sensitive topics, diversity and the consideration of the complexities of the underlying social and cultural determinants of Aboriginal health require a high level of cultural awareness and sensitivity. Non-Aboriginal people need to actively seek to build and maintain their cultural awareness, through formal training, cultural immersion and mentoring, so that they are able to provide a safe and secure service for Aboriginal people. Development and maintenance of cultural capabilities is an ongoing process for non-Aboriginal people which requires ongoing commitment.

4. Social determinants of Aboriginal health

The social determinants of Aboriginal health are often more complex or more pronounced compared to the factors that impact on the health of other populations in Australia. Aboriginal people are more likely to experience greater challenges in areas such as housing, education and transport; they are more likely to face social inequities and inequalities, to have lower incomes, lower levels of health literacy and they might experience food security issues. It is very likely that they experience grief and loss due to poorer health outcomes and lower life expectancy in their families and communities, and that they are exposed to intergenerational trauma. The extent to which an Aboriginal person is affected by these factors of course varies; however, historical and political contexts apply to the majority of Aboriginal people. It is important that health service providers consider these factors in their interactions with Aboriginal patients and to discuss health strategies and advice under consideration of the social determinants as they apply to the individual.

5. Time to listen, explain and discuss

The list of topics that need to be covered to adequately assess chronic disease risk in Aboriginal people is extensive, and the complexities associated with chronic disease risk factors and management are difficult to understand. Identification of disease or increased disease risk may
cause fear that may be exacerbated by unfamiliar environments, language barriers or low levels of health literacy, and it is important that clinicians and health service providers address any concerns. A health check attracts a rebate through the Medicare Benefits Schedule (MBS item 715) which provides for the additional time likely required to broach sensitive topics, improve Aboriginal people’s knowledge and understanding of their conditions and discuss in partnership with the patient and any family member or carer the management of chronic disease, risk factors and comorbidities. Operational processes need to allow for adequate time and flexibility to enable the delivery of a comprehensive, high quality health assessment for Aboriginal people.

6. Belief systems

Aboriginal cultural or spiritual belief systems can have an impact on an Aboriginal person's health and wellbeing and on their views and perceptions of disease and the factors that contribute to ill-health. Beliefs vary between different Aboriginal communities, and each person has a different relationship to their culture and spirituality. As health service providers, it is important to have a level of awareness and be prepared to accommodate different belief systems in conversations and discussions with Aboriginal people. This protocol cannot adequately address or explain Aboriginal belief systems and their implications for health service providers. A useful source for further reading is a discussion paper by Vicki Grieves, titled “Aboriginal Spirituality: Aboriginal Philosophy, The Basis of Aboriginal Social and Emotional Wellbeing”.

7. Empowerment, self-management and self-determination

The burden of chronic disease on Aboriginal people is significant and must be understood in a community context, as well as in the context of social, cultural and historic truths. Chronic disease risk factor management strategies therefore need to focus on the patient’s goals and priorities. The health system must enable the patient to determine the course of action, self-manage the disease and draw on support and specialist services as required.

8. A holistic health service model of care

The attributes and principles outlined in this section promote a model of health care that focuses on more than the biomedical of health and instead places equal value on all aspects of health. Having a clinic flow that gives equal power and contribution to different aspects of a health assessment by all members of a primary health care team enables best practice care for Aboriginal people with or at risk of developing chronic disease. Underpinning a multi-disciplinary team approach are enabling factors such as training and professional development for all staff and appropriate patient information management systems. Where possible, primary health service providers should consider employing Aboriginal staff to enhance the cultural capabilities and safety, as outlined earlier in this section, and to have the capacity to engage Aboriginal patients and clients.

Common chronic disease risk assessment for adults

The purpose of a health check is to collect patient information through taking a patient's history and undertaking examinations, to make an overall assessment of a patient's health and identify risk factors for disease, to discuss risk management strategies and healthy behaviours, and to provide advice and information\(^9\). Referrals to other services may be required for specialist screening.

The below topics must be discussed with an Aboriginal person to complete a health check, typically a Health Assessment for Aboriginal and Torres Strait Islander People (MBS item 715) or a similar health assessment undertaken by service providers who are not eligible for a rebate through the Medicare Benefits Schedule.

**Age**

Consideration is required of the higher prevalence of chronic disease risk factors and onset of disease in Aboriginal people at a younger age compared to the non-Aboriginal population.

**Gender**

Consideration is required of the cultural needs of Aboriginal people and the sensitivities related to gender.

**Family history**

Enquire about family history related to heart disease or stroke, diabetes and any history of cancer in a person’s immediate and extended family, including prevalence of risk factors in the family and mortality (e.g. premature deaths) related to chronic disease.

**Social history**

Enquire, in a culturally safe and appropriate manner, about the social and contextual factors that impact on a person’s wellbeing and their ability to maintain their health and, if required, manage chronic disease and/or risk factors. Social and contextual factors can include family violence, a history of incarceration (incl. in the family), interaction with the child protection system, deaths in family and community, including through suicide, education and employment, housing and financial wellbeing.

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Medication history and review

Enquire about prescription and non-prescription medication, including medication related to chronic disease management and other medication, assess risks of multiple medication and check eligibility for Pharmaceutical Benefits Scheme (PBS) refund. Review medication taking and identify if the person experiences barriers that prevents them from taking medication regularly or as prescribed (for example due to access issues or a lack of understanding of the purpose of the medication).

Tobacco smoking

Ask all persons aged 10 years and older, including pregnant women, if they smoke tobacco and assess their willingness to quit and their preferred quit approach. Apply a collaborative, supportive approach to support quit attempts (detailed outline in National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people).

Nutrition

Enquire about dietary habits, including consumption of foods with high fat and high sugar content, and awareness and accessibility of healthy foods (including the financial means to purchase and knowledge and skills to prepare healthy foods). Enquire about issues related to food storage and handling. Assess and discuss the need for nutritional supplementation for pregnant women.

Weight

Measure waist circumference as well as height and weight to calculate Body Mass Index. Discuss and provide advice on weight management. Refer to the National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people for measures to assess obesity and disease risk as well as Australian dietary guidelines for Australian adults.

Physical activity

Enquire about a person’s level of physical activity and sedentary behaviours, under consideration of their age, social and contextual factors, to assess their ability to develop and/or maintain an exercise routine. Discuss options and support uptake of low-intensity physical activity with slow progressions in volume and intensity, as appropriate, with people who are obese, have other chronic disease risk factors or comorbidities, especially related to diabetes, heart disease, stroke and cancer.

Mental health

Enquire about a person’s social and emotional wellbeing, under consideration of social and family history (outlined above) and use assessment tools as appropriate. For assessment of people aged 12-24 years, use gender-specific youth health checks. For detailed guidance refer to National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people).
Alcohol and other drugs

Age-appropriate assessment of drug and alcohol use under consideration of social and family history (outlined above) and use assessment tools as appropriate. For assessment of people aged 12-24 years, use gender-specific youth health checks. For detailed guidance refer to National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people.

Immunisation status

Enquire about a person's immunisation status for Human Papilloma Virus (HPV) and Hepatitis B (Hep B), especially with regards to risk to develop cervical cancer. Enquire about flu and pneumonia vaccinations, particularly in the context of diabetes and heart disease.

Sexual and reproductive health

Apply a high degree of sensitivity for the person's cultural and personal needs when enquiring about risk factors related to sexual and reproductive health and their history of sexually transmitted diseases. For detailed guidance refer to National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people.

Oral health

Diabetes and/or cardiovascular disease can contribute to poor oral health. Conduct a basic screening of a person's oral health by using the following 6 questions to identify people who would benefit from a dental appointment to conduct a full oral health check:

1. Do you have any of your own teeth?
2. Have you had any pain in your mouth while chewing?
3. Have you lost any fillings, or do you need a dental visit for any other reason?
4. Have you avoided laughing or smiling because of a problem with your teeth, mouth or dentures?
5. Have you had to interrupt meals because of a problem with your teeth, mouth or dentures?
6. Have you had difficulty relaxing because of a problem with your teeth, mouth or dentures?

Comorbidities and medical history

Assess all disease-related comorbidities, under consideration of social and contextual factors. Consider a person's broader medical history, for example their dental and/or oral health, a history of injuries that could be a barrier to physical activity and therefore, chronic disease management, including risk factor management.
Disease specific risk assessment

Diabetes

Diabetes complications often develop without noticeable signs and symptoms, and regular testing as outlined below is essential for early detection and commencement of appropriate management.


Age eligibility and other aspects that augment the diabetes risk

- Aboriginal and Torres Strait Islander peoples should be screened from 15 years of age.
- Women need to be assessed for a history of gestational diabetes and polycystic ovary syndrome.
- Anti-psychotic medication can cause an enhanced insulin resistance and therefore augments a person’s risk of developing diabetes.

Blood tests and blood pressure

Blood testing is required to assess glucose levels and HbA1c. Those with an AUSDRISK score of 12 or more should have a blood examination for fasting blood glucose (FBG) or HbA1c. Home blood glucose meters can also be used to assess day-to-day blood glucose over several days or weeks. HbA1c to provide overall blood glucose assessment. Blood testing is also required to assess and monitor serum lipids.

Record the person’s blood pressure at each visit.

Eye checks

A retinal assessment is required to assess diabetes-related retinopathy (asymptomatic deterioration of the eye). Retinal Photography with a Non-Mydriatic Retinal Camera is covered through MBS item 12325 and MBS item 12326. For further detail regarding diabetic retinopathy screening for people with diabetes, refer to the “Check today, see tomorrow” checklist for MBS Item 12325 Non-mydriatic Retinal Photography for Detection of Diabetic Retinopathy, developed by Melbourne University.

Feet checks
Diabetes can cause reduced sensation (neuropathy) and reduced circulation (peripheral vascular disease) and cause an increased risk to the development and poor healing of foot ulcers. Testing sensation using an approved method, checking both foot pulses on both feet, a visual examination assessing self-care such as nail care and the presence of blisters or pressure areas is required. Checking of footwear is important in this context, especially where the patient has low sensation in their feet.

Chronic Kidney Disease
Complications that require consideration in the context of diabetes include Chronic Kidney Disease. Undertake a urine sample test to screen for albuminuria and blood testing to assess estimated glomerular filtration rate (eGFR).

Cancer

Cultural and gender requirements
Cancer screening requires discussion of gender-specific health issues and naming of body parts which can create discomfort and interfere with the cultural requirements of Aboriginal people. It is important that health professionals apply a high degree of sensitivity and explore a person's cultural needs before discussing clinical procedures and health issues that relate to breast, cervix or bowel cancer. Where possible, the gender of the patient and the health professional should be matched, and the health professional should inquire if the patient would like to have a support person present, especially where gender-matching is not an option. Language should also be chosen carefully. Cervix screening is often referred to as “well women's screening”.

Age ranges
Screening for the most common cancers should be undertaken at a person’s age that corresponds with the known risks of disease onset, the average age for which is around 10 years younger, among Aboriginal people. Note that screening outside of the standard eligibility criteria requires informed consent and can incur out-of-pocket expenses.

Cervical cancer: well women's screening / cervix screening - HPV testing – 20 years +
*Note: Women under 25 years and not symptomatic may be billed for screening as this is not covered by Medicare.

Breast cancer: mammogram – 40 years +
**Note: There is generally no point of care testing available. Referral to BreastScreen SA is required. The costs for screening of women aged 40 years + is covered by Medicare.

Colorectal cancer: faecal occult blood test (FOBT) – 40 years +
***Note: The National Bowel Cancer Screening Program provides FOBT kits out to people aged 50 years +. Pharmacies provide FOBT kits at a cost, and the results are not currently reported to the National Bowel Cancer Screening Program. Further information about FOBT testing is available at the Department of Health National Bowel Cancer Screening Program website13.

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Alternative screening options for cervical cancer

Increasingly, primary health care providers will be able to offer self-collection as an alternative option for HPV testing to women who are considered “under-screened” or who have never been screened and are aged 30 years and over. For detailed information, refer to the Department of Health National Cervical Screening Program website\(^{14}\).

During the introductory phase of the self-collection test, it is important that primary health care providers ensure that their pathology providers have the required accreditation and are able to process self-collected samples.

Immunisation

Liver cancer is growing in Aboriginal people and can be prevented through Hepatitis B and C immunisation. It is important to check immunisation status and offer these immunisations as required.

Heart disease and stroke

The Consortium endorses the Guidelines for the management of absolute cardiovascular disease risk, published by the National Vascular Disease Prevention Alliance (NVDPA)\(^{15}\), as a best practice approach to screening for heart disease and stroke. In addition to common risk disease assessment, screening includes:

- Blood pressure
- Serum lipids
- Fasting plasma glucose (or HbA1c where plasma glucose not possible) to confirm diabetes
- Left ventricular hypertrophy, assessed by echocardiography
- eGFR to estimate renal function

It is recommended that people identified with established cardiovascular disease or to be clinically determined as high risk be managed according to the NVDPA guidelines for management. Those determined to be at clinically high risk of cardiovascular disease are those people:

- With diabetes and aged over 60 years
- With diabetes with microalbuminuria (>20 mcg/min or UACR >2.5 mg/mmol for males, >3.5 mg/ mmol for females)
- With moderate or severe chronic kidney disease (persistent proteinuria or eGFR < 45 mL/min/1.73m\(^2\))
- With a previous diagnosis of familial hypercholesterolaemia
- With a systolic blood pressure of ≥180 mmHg or diastolic blood pressure of ≥110 mmHg
- With serum total cholesterol of >7.5 mmol/L.


Age range

It is recommended that screening for cardiovascular risk factors and disease commence at age 15 and occur at least once a year, in accordance with the Essential Service Standards for Equitable National Cardiovascular care for Aboriginal and Torres Strait Islander people (ESSENCE)\(^\text{16}\). Screening should include assessment of the following:

- Body mass index
- Smoking status
- Blood pressure
- Serum lipids
- Psychosocial stress, including depression
- Physical activity
- Diet
- Fasting plasma glucose (or HbA1c where plasma glucose not possible)
- eGFR to estimate renal function

It is recommended that absolute cardiovascular disease risk assessment commence at age 35, in accordance with the NVDPA guidelines, using the Framingham Risk Equation, recognising that this approach is likely to underestimate risk and provides an estimate of minimum cardiovascular risk.

Rheumatic Heart Disease (RHD):

Factors which may indicate a high risk for RHD include:

- A history of regular sore throats
- Recurrent skin sores
- Reports of previously un-investigated joint pain and/or swelling
- A heart murmur
- Symptoms of heart failure
- A previous history of acute rheumatic fever (ARF), not currently being actively followed up.
- A family member with ARF and/or RHD

Given the non-specific symptoms, it is important to consider these risk factors in the context of a person’s family and social history, as this may indicate a higher risk of RHD (e.g. history of family or community members requiring treatment for ARF/RHD or frequent injections, overcrowded and poor housing conditions).

If a number of these risk factors exist, screening for RHD is recommended. The more factors that are present, the greater would be the expected diagnostic yield from echocardiography. Consider a lower threshold for investigation in pregnancy. To screen for RHD, an echocardiogram and subsequent cardiology review is required.

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\(^{16}\) Brown, Alex et al. (2015), Essential Service Standards for Equitable National Cardiovascular Care for Aboriginal and Torres Strait Islander People, Heart, Lung and Circulation, Volume 24, Issue 2, pp.126 – 141.