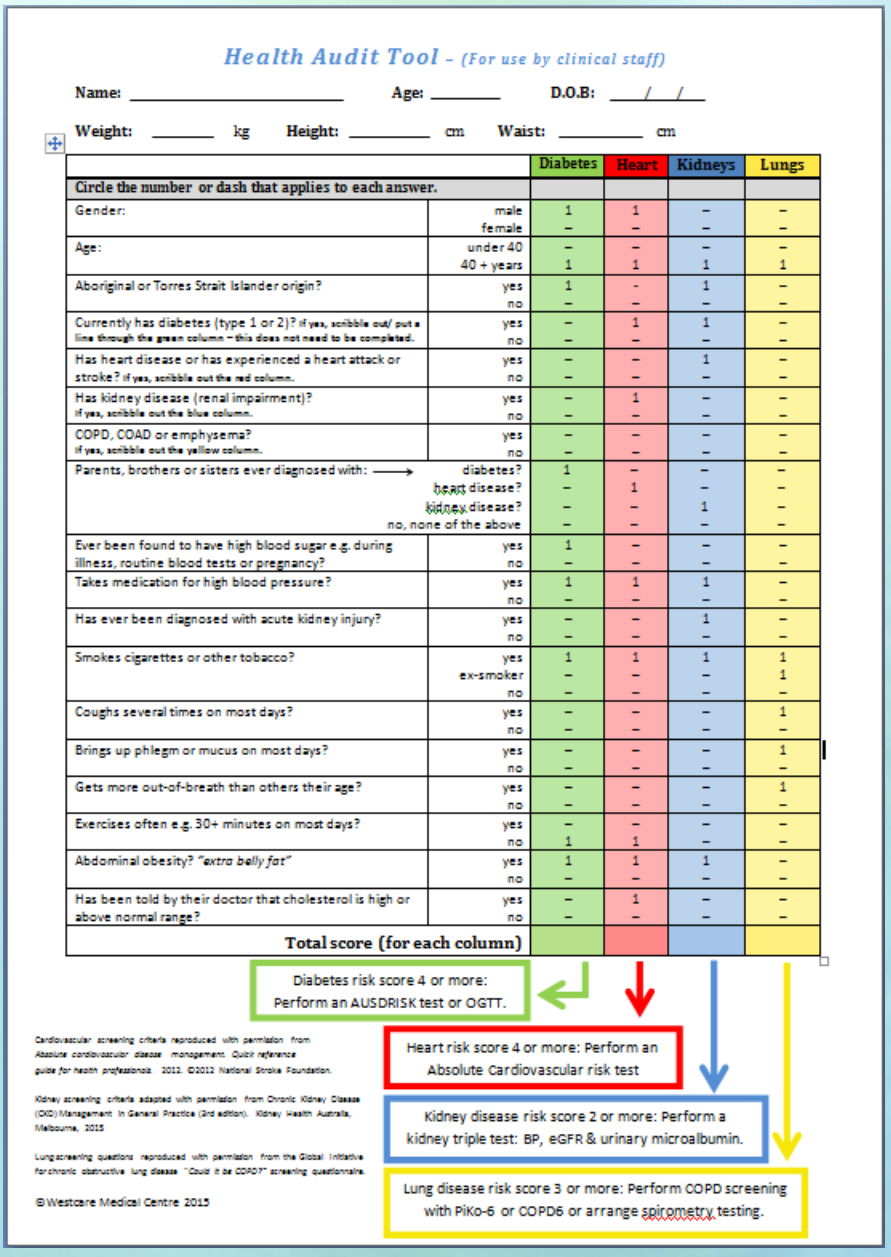

Health Audit Tool – (For use by clinical staff)

Name: _____ Age: _____ D.O.B: ___/___/___

Weight: _____ kg Height: _____ cm Waist: _____ cm

		Diabetes	Heart	Kidneys	Lungs
Circle the number or dash that applies to each answer.					
Gender:	male	1	1	–	–
	female	–	–	–	–
Age:	under 40	–	–	–	–
	40 + years	1	1	1	1
Aboriginal or Torres Strait Islander origin?	yes	1	-	1	–
	no	–	–	–	–
Currently has diabetes (type 1 or 2)? if yes, scribble out/ put a line through the green column – this does not need to be completed.	yes	–	1	1	–
	no	–	–	–	–
Has heart disease or has experienced a heart attack or stroke? if yes, scribble out the red column.	yes	–	–	1	–
	no	–	–	–	–
Has kidney disease (renal impairment)? if yes, scribble out the blue column.	yes	–	1	–	–
	no	–	–	–	–
COPD, COAD or emphysema? if yes, scribble out the yellow column.	yes	–	–	–	–
	no	–	–	–	–
Parents, brothers or sisters ever diagnosed with: →	diabetes?	1	–	–	–
	heart disease?	–	1	–	–
	kidney disease?	–	–	1	–
	no, none of the above	–	–	–	–
Ever been found to have high blood sugar e.g. during illness, routine blood tests or pregnancy?	yes	1	–	–	–
	no	–	–	–	–
Takes medication for high blood pressure?	yes	1	1	1	–
	no	–	–	–	–
Has ever been diagnosed with acute kidney injury?	yes	–	–	1	–
	no	–	–	–	–
Smokes cigarettes or other tobacco?	yes	1	1	1	1
	ex-smoker	–	–	–	1
	no	–	–	–	–
Coughs several times on most days?	yes	–	–	–	1
	no	–	–	–	–
Brings up phlegm or mucus on most days?	yes	–	–	–	1
	no	–	–	–	–
Gets more out-of-breath than others their age?	yes	–	–	–	1
	no	–	–	–	–
Exercises often e.g. 30+ minutes on most days?	yes	–	–	–	–
	no	1	1	–	–
Abdominal obesity? *"extra belly fat"*	yes	1	1	1	–
	no	–	–	–	–
Has been told by their doctor that cholesterol is high or above normal range?	yes	–	1	–	–
	no	–	–	–	–
Total score (for each column)					

Diabetes risk score 4 or more: Perform an AUSDRISK test or OGTT.

Heart risk score 4 or more: Perform an Absolute Cardiovascular risk test

Kidney disease risk score 2 or more: Perform a kidney triple test: BP, eGFR & urinary microalbumin.

Lung disease risk score 3 or more: Perform COPD screening with PiKo-6 or COPD6 or arrange spirometry testing.

The Health Audit (HAT) Tool Implementation Guide for general practices.

Westcare Medical Centre 2015

Contents

Introduction

1.1 HAT tool history and purpose

The Health Audit Tool came into being as the WHAT tool (Westcare Health Assessment Tool) in late 2013 in response to the growing CKD epidemic. One of our practice nurses had attended a seminar on kidney and cardiovascular disease, and was concerned that we and practices throughout Australia were under screening for these important and insidious diseases.

Diabetes screening had increased substantially in recent years due to the Australian Diabetes Risk (AUSDRISK) screening tool, and it was hoped that we could produce a multiple disease risk screening tool to address several diseases at once. This would be a more efficient screening approach for the practice, and also less cumbersome for the patient.

Initially the screening tool assessed for risk of three diseases: cardiovascular disease, kidney disease and type 2 diabetes, and underwent piloting at Westcare Medical Centre throughout 2014. More recently, COPD screening questions have been added, resulting in a rapid screening tool for four major chronic diseases. The tool is now developed in four formats: a tri-fold patient friendly leaflet, an A4 patient friendly form, a printable A4 form for clinician use, and a Rich Text Format template for use in the clinical software. It is hoped that the use of this tool throughout Australia will lead to a marked increase in preventative health discussions, health improvement and the early identification and treatment of these diseases.

1.2 Permissions

To facilitate a streamlined approach to screening, the initial pilot tool utilised the original Australian Type 2 Diabetes Risk Assessment (AUSDRISK) tool to assess diabetes risk, however permissions to reproduce the AUSDRISK in the Health Audit Tool have since been denied. Diabetes screening on the tool is therefore in a more basic format, and a risk score of 4 prompts the user to complete a more in depth AUSDRISK test to fully assess level of diabetes risk.

Cardiovascular screening questions on the Health Audit Tool have been reproduced with permission from the Absolute cardiovascular disease management. Quick reference guide for health professionals. 2012. ©2012 National Stroke Foundation.

Kidney screening criteria were adapted with permission from Kidney Health Australia's Guidelines for the assessment of chronic kidney disease. 2012. ©2012 Kidney Health Australia, and have been updated in accordance with the Chronic Kidney Disease (CKD) Management in General Practice (3rd edition). Kidney Health Australia, Melbourne, 2015.

Lung screening questions were reproduced with permission from the Global Initiative for chronic obstructive lung disease "Could it be COPD?" screening questionnaire, available at http://www.goldcopd.org/could-it-be-copd.html .

1.3 Conditions of use

The Health Audit Tool and associated documents contained in the accompanying resource kit remain the intellectual property of Westcare Medical Centre and may be used without modification free of charge by any medical centres, clinics or sole practitioners within Australia. A Rich Text Format document is supplied for integration with clinical software. It is expected that practices will apply the necessary fields in the designated spaces, but will otherwise leave the tool unchanged, including the text ©Westcare Medical Centre at the bottom.

Intention to use the Health Audit Tool, other than straightforward use of the unmodified tool in clinical settings as described above, must be applied for in writing to

Westcare Medical Centre
1/211 Barries Rd
Melton West VIC 3337

Or via email,
attention to: Clinical Coordinator at gps@westcare.net.au.

1.4 Acknowledgments

Westcare would like to acknowledge the following organisations and individuals who have provided us with encouragement to make this project a reality and share it with others:

- The staff and patients of Westcare Medical Centre who have faithfully worked through all the glitches and changes, and provided much needed feedback to help us refine the Tool and our processes
- The Improvement Foundation http://improve.org.au
- The Australian Primary Healthcare Nurses Association http://www.apna.asn.au
- Del Lovett, RN
- Macedon Ranges and North-Western Melbourne Medicare Local http://mrnwm-ml.org.au
- Heart Foundation http://www.heartfoundation.org.au
- Kidney Health Australia http://www.kidney.org.au
- Global Initiative for Chronic Obstructive Lung Disease http://www.goldcopd.com

Introducing the HAT tool to your practice.

2.1 Approaches to implementing the HAT tool in your general practice setting

General practices are extremely diverse, and therefore implementation strategies will vary from setting to setting. The aim of this section is to propose and discuss a variety of approaches to assist you in the introduction of the HAT tool into your practice. Not all approaches will work in every practice setting; however this guide will assist you in defining your own practice's screening strategy.

Approach 1: Reception staff hand the patients a HAT form to complete in the waiting room, for discussion with the GP during their visit.

Pros:

If viable within your practice, this approach will lead to the greatest number of screenings. The GPs see 100% of the practice population, whereas the nurses may only see 10-60%. In quieter practices where possible, this would be the optimal approach to achieving a high level of screening/preventative care visits.

If the pace of your practice rules this approach out, it can still be a useful tool when new GPs or registrars are coming on board, as a way of building up their regular caseload. It also instils in new practitioners the importance of preventative medicine in primary healthcare.

Cons:

Adding a preventative health discussion (instigated by the HAT tool) into routine GP visits can potentially cause time blow-outs. One potential solution can be to limit this to a certain number of HAT tools per doctor per day. Trial and agreement with the GPs is highly recommended before rolling out this strategy within your practice.

Patients may also need assistance in completing the HAT tool due to vision, cognitive or language barriers. The pace of some clinic receptions can accommodate this, while others are far too busy to be able to provide this level of extra support on a regular basis.

Approach 2: A designated nurse routinely sees all or a segment of the patient population for a Health Audit visit. Examples of this can be: all patients who are new to the practice are assigned a Health Audit visit with the nurse before they see the GP, or all patients within a target range such as 40-49 are offered a Health Audit visit.

Pros:

This can be an excellent way to screen a target group and also improve clinical data.

This can assist in finding patients with risk factors who would qualify for the '45-49 year old' or '40-49 at risk of diabetes' health assessments.

Cons:

There is limited financial remuneration for the nurse's component of care. Because of this, a large scale 'blanket approach' may not be financially viable in the long term (or with a larger clinic population), but is still worthy of consideration when setting up a new practice or in the lead up to accreditation, to ensure data quality.

Approach 3: Patients complete the HAT tool in the waiting room and return them to reception for later follow up (of patients with high risk scores) by the practice nurse.

Pros:
Although our trial of this approach was not successful, the practice nurse could follow up with a telephone health coaching call rather than requesting they book an appointment, and only offer 'an in depth health assessment visit' for qualifying 40-49 year olds.
In the case of a telephone coaching call approach, a further follow up call in 1-3 months would be a valuable consideration to support patients' health change goals.

Cons:
During our trial of the HAT tool, we used the 'reception & follow up by a nurse' approach with one main difference: we offered *all* high risk scorers a practice visit with the nurse to 'discuss their risk scores'. We found that oftentimes patients did not want to come back in for an extra appointment, and therefore many declined or failed to attend their booked appointments. This also led to increased administrative burden for the nurses to ensure we were appropriately actioning and documenting all encounters.
We soon acknowledged that our 'marketing language' may have accounted for some of this failure, and addressed this, but overall we found that conducting the HAT discussion during face to face care (at the time of assessment) was much more effective, so we eventually ceased this approach altogether.

Approach 4: Incorporate into routine care: Treatment Room

Pros:
Conducting HAT tool assessments and discussions during the course of treatment room care can be a great way to start effective health promotion conversations with patients. In addition to this, they are also a fruitful way of filling in time when a patient is waiting for the GP (e.g. to review a wound or check a medication.)

Cons:
Ideally the practitioner will have immediate access to a computer to conduct further screening if indicated, and to document the encounter & screening outcomes at the time of the visit. In some practices, computer access may be limited.

In addition, some larger treatment rooms may be too busy to facilitate the use of this tool on a regular basis. In this case, you could combine the treatment room approach with other strategies to increase screening in your practice.

Approach 5: Incorporate into routine care: Nurse Led Clinics

Pros:
This has been one of our most effective screening approaches to date. To facilitate regular use of the HAT tool during other care, a prompt was added to our autofill shortcuts. We use autofill shortcuts as a template to add additional information into the progress notes after completing a basic assessment in our clinical software. An example of one of our

Cons:
Needs and complexity differ with each patient seen, and therefore there are occasions when additional care such as screening for additional chronic disease risk cannot be achieved within the given timeframe. It is important to consider the level of care and attention you would like to provide in your nurse led clinics, and allocate a realistic amount of time in which to achieve this.

shortcut prompts for a diabetes review visit is shown at Figure 2.1 below. By including the HAT tool prompt in our shortcuts we have increased the value and effectiveness of the nurse led clinic visits. Nurses are often geared towards prevention, so this approach makes good use of their skill set.

As seen in Figure 2.1, we want to address many areas in addition to the standard measurements and foot check required in the diabetes cycle of care, so in this instance we allocate an hour for the nurses to complete the visit and care plan/ review draft.

Figure 2.1 Example of our diabetes autofill shortcut (=diabetesreview)

Diabetes Check performed by Nurse

Diabetes understanding: Clear/unclear How long since diagnosis?
Diabetes education received:

Last HbA1C: Increase/decrease?

BGL today: Usual range:

Self- Management: Does pt check home BGLs? How often? Any hypos (if on insulin)? How do they manage them? Device use?

Diet: Typical Daily Intake:

Frequency of unhealthy foods, e.g. sweets, chocolate, chips, soft drink, cakes, desserts, fried food, other take-away:

Dietary education given:

Alcohol: **Smoking:**

Physical Activity:

Foot check findings:

Last eye check:

Last ECG: (recommended 2-yearly)

Vaccinations- Flu: Pneumococcal:

Lifestyle and self care goals discussed:

Any problems with medication?

Any chest pain in past few months? Consider HAT tool if appropriate and perform Absolute Cardiovascular risk assessment if nil existing CVD.

Any erection difficulties?

Mental Health-

During the past month have you often felt down, depressed, or hopeless?

During the past month have you dropped off in interest or pleasure in doing things?

Nurse's Recommendations:

Items eligible for billing today:

Recommended investigations:

Recommended pathology:

Approach 6: Record Audit Visit

This approach stemmed from a review of our results after using approach 3 for several months. We found that patients we not responding well to the idea of 'discussing their risk' when they were not yet face to face with a practitioner. That is; when telephoned by a nurse or when the tool was promoted at reception, patients were more inclined to resist the idea of the visit. We felt that this was partly to do with the mention of risk – this was a negative point to bring up, and reception staff were not in a position to elaborate further. Other reasons cited by patients were that they already had many other appointments to attend, and a lack of time or interest.

The Record Audit Visit attempts to address many of these barriers.

Process: When a patient telephones the clinic to book an appointment with their GP, the reception staff member will check the assessment nurse's column for a vacant 15 minute appointment immediately prior to their preferred visit time. If there is an appointment available, the receptionist will use a defined spiel to offer a record audit visit: e.g. "We are currently auditing our medical records to ensure they are current and complete. Would you be willing to see the nurse for a short visit for this prior to seeing the GP?" We found that patients were more inclined to agree to this type of visit which fitted in with their plans (they were already needing an appointment with their GP) and which did not raise the issue of 'risk' ahead of time.

At the subsequent nurse visit we would then conduct a brief audit of their file, adding clinical data including height, weight, waist, smoking, alcohol, allergies, nutrition and physical activity. By this time we are face to face, have built a budding rapport and already begun to ask lifestyle related questions in a non-threatening way. We would then ask consent to conduct a further quick assessment (the HAT tool) to look at their risk of developing 4 major chronic diseases. This strategy led to consent in all cases, and we were able to proceed further and achieve our aims of assessing and discussing their risk.

Pros:

This is a good way of getting to assess those who would not normally be seen in the nurse led clinics. Although approach 5 (Nurse Led Clinics) has probably been our most effective tactic, it only allows us to screen patients who already have a chronic illness and are typically regular users of general practice. This more random approach of offering any adult callers a Record Audit Visit enables us to potentially screen those who do not yet have a chronic illness.

The Record Audit approach also enables us to utilise gaps in the appointment book, and therefore this is especially worth consideration during low periods such as after Christmas or when opening new appointment columns where there are lots of free appointments.

Cons:

Medical clinic receptions are often very busy places, and as such, staff may forget to offer Record Audit visits routinely. Messages to staff may need to be reinforced regularly and barriers addressed to ensure Record Audit visits are offered on an ongoing basis.

This type of visit with a nurse is not remunerated by Medicare, and each practice will need to evaluate whether billing the cost to the patient will work with their patient demographic. Our approach is to offer the visits free of charge as a support to the patients – it also supports our goal of improving the health of our local population. Because of this though, preference is always given to allocating the assessment columns for billable items such as care plans, and this may mean that no 15 minute slots are available for a Record Audit when needed.

Approach 7: Use marketing materials to invite patients to book a Health Audit Visit.

Pros:
Practices these days have many forms of marketing 'spaces' available to them, from wall space for posters, to newsletters, social media, websites, on hold message services and waiting room television advertising. Many clinics will already be using a range of marketing methods, and can add health promotional messages as desired. Often existing marketing can be employed without further outlay; however in some cases an investment in advertising may bring excellent returns.

Cons:
Clinics in low income areas may not wish to charge patients a fee for the Health Audit Visit, and this may limit the funds available for running a Health Audit campaign. Consider what existing modes of advertising you can utilise without incurring any additional cost.

As with most campaigns, using a variety of strategies to implement the HAT tool in your practice will lead to a greater impact, and a wider diversity of people reached. How will you combine the suggested approaches above to roll out a Health Audit campaign in your clinic?

2. 2 Conducting a HAT tool assessment

The HAT tool has been designed with non-modifiable risk factors at the top and modifiable risk factors towards the bottom. This enables clinicians to focus the patient's attention on the factors which can be improved upon with lifestyle changes. Once a person has completed the HAT tool (with or without the assistance of the healthcare provider), the clinician can explain what the scores mean and facilitate a discussion around individual risk factors.

2.3 Use of the resource kit tools

General instructions about the HAT tool. A HAT tool score which indicates potential risk prompts the clinician regarding further action to be taken.

As mentioned earlier, it was originally planned to combine the full AUSDRISK diabetes test with screening questions for other chronic diseases to reduce and simplify the screening process. As permission has not been granted to incorporate the AUSDRISK test at this stage, diabetes screening will require a 2 step process. Some clinical software packages have the AUSDRISK 'Diabetes Assessment' included, and they import some of the clinical data into the test, making this second step quite simple to complete. For those clinics that do not have access to the diabetes risk assessment on their clinical software, an online calculator can be found at http://www.letspreventdiabetes.org.au/take-the-test. If insulin resistance is suspected, the clinician may opt to order random glucose or oral glucose tolerance test (OGTT) instead of further assessment screening. Note that a high AUSDRISK score (12 or more) is required for patients to have a 40-49 year old health assessment.[1]

The cardiovascular screening component was originally designed for completion by patients in the waiting room, and therefore does not include the lipid and systolic blood pressure scores which are needed to determine a person's absolute risk. Although other versions are designed for clinician use, it was decided to keep the assessment uniform across all versions. The CV screen is therefore meant to indicate potential risk, and be followed up by a calculation of the person's Absolute Cardiovascular Risk in the clinic, once the patient's lipids and blood pressure are known. Again, the Absolute Cardiovascular Risk assessment can be found on some clinical software programs, or online at http://www.cvdcheck.org.au.

Kidney screening guidelines as stated by Kidney Health Australia (2015)[2] recommend that at risk people have an annual 'kidney triple test': blood pressure, eGFR test and urinary microalbumin test. Although 1 in 3 adults are at risk of kidney disease, only a minority of Australian adults have been screened for CKD using the triple test.

Lung disease screening should include some form of respiratory function testing, depending on what is accessible in your practice. Piko-6 and COPD6 devices are relatively low cost and enable you to quickly determine whether spirometry testing will be needed. Note that the Lung Foundation Australia recommends screening with these devices for patients aged 35 and above (2014)[3]. Contraindications for respiratory screening with any of these devices include abdominal, thoracic or eye surgery, heart attack, chest pain, respiratory infection or collapsed lung (pneumothorax) within the past eight weeks, OR currently coughing up blood, at risk of fainting, nausea, vomiting or has an intracranial aneurism. It is essential that these contraindications are checked before proceeding to ensure the patient is fit for testing.

Use of printed versions of the HAT tool will require scanning or recording of the risk scores in the notes afterwards. You could use an autofill prompt (see pp. 6-7) for this, such as "Health Audit

[1] Medicare Benefits Schedule Online. Commonwealth of Australia, 2007. available at http://www9.health.gov.au/mbs/fullDisplay.cfm?type=note&q=A27&qt=noteID&criteria=705

[2] Chronic Kidney Disease (CKD) Management in General Practice (3rd edition). Kidney Health Australia, Melbourne, 2015.

[3] Abramson M, Frith P, Yang I, McDonald C, Hancock K, Jenkins S, McDonald V, Zwar, N, Maguire, G, Halcomb, E, Polak Scowcroft, C. COPD-X Concise Guide for Primary Care. Brisbane. Lung Foundation Australia. 2014

Completed. Patient may be at risk of: _____ Modifiable risk factors discussed: _____ Patient wants to work on: _____ Further actions taken: _____ Reminder added for repeat screening in __ months. Follow up action prompt added for __ months."

The HAT tool resource kit contains the following tools which can be used freely in accordance with the terms listed in Section 1.3:

- **HAT tool – clinician form version**. This is a single page form designed for printing (e.g. in bulk) and manual completion by the nurse or doctor during consultation with the patient. The instructions are to circle the number or dash that applies to each answer, across all of the four columns. If the patient has one or more of these chronic diseases, the applicable columns can be crossed out, and only the remaining columns need be completed. This is probably the fastest and easiest version of the tool – it takes only a couple of minutes to complete, and because it is on a page in front of you, it also facilitates completion of the subsequent tests in a quick and simple manner.

- **HAT Tool form for clinical software.** This form is designed for use on clinical software in the program's letter writer section. It can be uploaded as a rich text format template, and will need the correct fields inserted before use. The form is designed so it can be printed off after completion (if the patient requests a copy), and thus features only minimal colour.
  To use this template, the clinician would delete all dashes and the numbers that do not apply, leaving the applicable numbers to be added up for each column. An alternative to this method would be to highlight, bold or change the colour of the numbers that apply. This version of the tool is an early model, and we expect that it will be further improved in the future. User feedback is welcome: please forward all comments and suggestions to the email address shown on page 4 of this guide.

- **Patient friendly tri-fold leaflet.** This leaflet is designed for professional printing and use in waiting areas and other common zones where a patient may pick it up and complete it without prompting by practice staff. The explanatory section on the back prompts patients to discuss their risk scores with their nurse or GP, however you can also use the bottom front section to place a sticker with specific instructions (e.g. where to take the completed form) if you wish. Alternatively the same section of the leaflet can be stamped with the practice stamp – especially good for use further afield at support groups, Men's Sheds and other community gathering places.

- The **patient friendly A4 form** is designed for reception staff to hand out to patients, either at random, targeting a particular population, or with New Patient forms to all newcomers to the practice. It does contain an instruction ('hand it to the doctor or nurse'); however this can be overlaid with a sticker if a different instruction is required for your purposes. This form is to be used with the accompanying **HAT tool quick treatment guide**: a summary sheet which can be printed, laminated and pinned to the clinician's wall for further reference on how to action the scores.

- As advised earlier, it is most effective to discuss the results with the patient at the time the Health Audit Tool is used, however this may not be possible in every situation. **What do my Health Audit scores mean?** is a handout which may be used in conjunction with the patient

friendly form if the results will not be discussed in the same visit. This gives them some explanation of their scores while still directing the patient back to their GP or nurse for further testing or advice.

- Finally, the **HAT Tool Nutrition and Activity questionnaire** is an optional extra tool which can be used with patients who identify these modifiable risk factors as areas they'd like to improve. This can be used with motivational interviewing techniques to help patients develop their own goals and make small steps towards lifestyle improvement. The more detailed questions help them to drill down and recognise problem areas, and facilitate discussion around these issues.

2.4 Final remarks

A word about reminders: To get the most benefit out of your HAT tool campaign, it is also important to add reminders so this prevention activity continues to occur on an ongoing basis. Consider as a practice what your reminders will be, and at what interval? Do you want to screen every patient annually, and is this viable with the approaches you've chosen to implement? The best practice recommendations vary greatly depending on the patient's situation and level of risk. Our practice approach is to re-screen with the HAT tool every 2 years, and add a separate reminder for an annual kidney health check if this is indicated.

Consider the following recommendations when deciding on your practice's reminder strategy.

- kidney screening for 'at risk' patients every 2 years or every 1 year for patients with hypertension or diabetes[4]
- absolute cardiovascular risk screening for patients with a high to moderate risk every 6-12 months (or less often if very high), and for low risk patients every 2 years[5]
- diabetes risk screening every 3 years for patients over the age of 40[6]

Note: No clear recommendation for repeat screening intervals for COPD was found.

Follow-up of lifestyle discussion: A recent audit of our own HAT tool screening results showed a clear need for further follow-up of patients after their initial HAT tool visit. Lifestyle factor discussions were generally noted at the time of the assessment, but there was far less follow up (such as repeat measurement of weight or further discussion of diet, smoking, physical activity etc.) recorded in the 2-6 months after the visit. This is something we now need to implement. Adding a follow up process may increase patient accountability, help address further barriers to lifestyle change, and will also assist you to monitor the outcomes of your efforts. A suggested approach for this is to add an Action prompt in your clinical software for a review 3 months' time, and possibly also an autofill prompt (discussed on pp. 6-7) to guide the review process. As this visit is only remunerated for GPs, aim to keep the review process (i.e. the autofill prompt) very short and simple to facilitate ease of use during a consult.

[4] Chronic Kidney Disease (CKD) Management in General Practice (3rd edition). Kidney Health Australia, Melbourne, 2015.
[5] National Vascular Disease Prevention Alliance. Guidelines for the management of absolute cardiovascular disease risk. 2012.
[6] National Health and Medical Research Council. National Evidence Based Guideline for Case Detection and Diagnosis of Type 2 Diabetes. Canberra: NHMRC, 2009.