We would like to thank the following people for their support and input in developing the draft of this tool:

- Meredith Stewart, Falls Prevention Project, Country Health SA Local Health Network, Government of South Australia.
- Kate Saint, Manager, Population Health Portfolio, Country Health SA Local Health Network, Government of South Australia
- Dr Angela Lawless, Senior Research Fellow, SA Community Health Research Unit and Southgate Institute for Health Society & Equity, Flinders University, South Australia
- Dr Rebecca French, Researcher, Monash University, Victoria
- Michael Cox, Information Officer, SA Community Health Research Unit, Flinders University, South Australia.

*Suggested citation:*

What is the Digital Equity Tool for?

The purpose of the Southgate Digital Equity Tool is to assist policy makers and practitioners in making informed decisions about the way they engage consumers in health services and programs. The Tool has been developed by the Southgate Institute for Health Society & Equity at Flinders University, by Dr Lareen Newman PhD, Ms Kate Patel MPH and Professor Dean Carson PhD.

This tool will guide your thinking around the impact of traditional and digital communication on different population groups, with a focus on the impact of shifting to digital engagement with consumers.

The basis for the tool is the assumption that digital engagement strategies will impact on population groups differently, with a differential impact on health outcomes, especially access to health services and health information.

The tool can be used to examine one strategy or a set of communication strategies which address a health issue, a geographic area, or a population.

Part 1 is a Workbook for you to complete. Part 2 ‘The Guide’ (starting page 11) should be used in tandem to help you complete the Workbook; it provides descriptions and examples to assist you.

The Southgate Digital Equity Tool can help you and your organisation to examine:

- The current mix of communication and engagement modes across a certain health service or issue
- A proposed change in this mix
- The impact of a change in mix retrospectively
- Mitigation strategies to limit negative impacts
Why the Digital Equity Tool can be useful

As health and other services shift more and more towards engaging consumers through digital modes of communication and service delivery, the impact on population groups’ ability to engage in this way and on longer term health and wellbeing outcomes must be considered.

Many services which are extensively developing websites or apps are under the assumption that ‘everyone is online’. However, the box below shows that not everyone has digital access, and those people with poorer health are often those with less digital access or no access. Indeed, the very people who could benefit more from improved access to health information and healthcare are those who are less likely to have digital access.

By identifying the logic behind ‘going digital’ – that is, the intended benefits, for whom, and by what mechanism – we can examine the relative impact of any shift in the way consumers are engaged. This tool provides a framework and tools to identify the context, logic, and impacts of digital service provision and consumer engagement. This assessment can then be used to modify changes, or to inform a more appropriate mix of digital and offline communication and engagement modes.

It is useful to keep in mind some current facts about digital engagement in Australia. These facts, and other evidence you gather in the process of completing the tool, should inform your analysis of any engagement strategy and the likely impacts on your population of interest.

FACTS IMPACTING DIGITAL ENGAGEMENT IN AUSTRALIA

- 73% of the population have home Internet access; 27% are without.
- 45% of the lowest-income households do NOT have home Internet.
- 82% of university-educated over-60s have Internet; 43% with low education.
- 53% of 25-44 year olds use the Internet to contact government services; use is lower in younger and older groups.
- 57% have a Smartphone, but lower income = lower Smartphone ownership.
- 44% of Australian adults aged 15-74 have reading levels below that needed for everyday life and work.
- 16% of the population do not speak English well or at all.

See a wide range of population data for your area at www.publichealth.gov.au/interactive-mapping/

Source: ABS 2011 Household Use of Information Technology; ACCAN 2012 Consumer Perceptions Survey
Part 1: The Workbook

Step 1: Answer questions 1-10. Use the Guide on pages 11-16 to help you.

1. What is the scope of digital engagement strategies to be analysed with this tool? What is the broader context? Across what issues/topics/populations?

2. What is the logic for your current mix of consumer engagement strategies (digital or otherwise)? i.e. who and how do they engage?

3. What is the logic (rationale) for any proposed changes to the mix?
4. What evidence do you have that consumers have the resources, skills or motivation to engage using digital and other modes of communication? Consider population statistics, provider experience, and community needs analysis. Consider issues beyond ICT skills.

<table>
<thead>
<tr>
<th>Capacities and Skills</th>
<th>Known Evidence</th>
<th>No Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. English literacy level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.g. Motivation and confidence to use digital engagement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical and geographic access / availability</th>
<th>Known Evidence</th>
<th>No Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. geographical location of the service relative to population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.g. geographical location of public Internet access points and social accessibility of these for your population of interest</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. (continued)

<table>
<thead>
<tr>
<th>Other access / availability factors</th>
<th>Known Evidence</th>
<th>No Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. financial cost as a barrier to physical ownership of a computer or access to the Internet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Known Evidence</th>
<th>No Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please print extra copies of this page as needed.
5. Consumer Engagement formats and specific barriers

Repeat this table for each engagement barrier (as selected from any aspect of the evidence you generated in (4)).

<table>
<thead>
<tr>
<th>Format</th>
<th>‘Engagement Barrier Lens’</th>
<th>Better for…</th>
<th>Worse for…</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(e.g. Digital Literacy, Physical access, Cultural background)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face to face/voice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Website (may incorporate text or video or graphics, multiple languages) – e.g. diabetes online support forum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pamphlet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stall at expos</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family facilitated engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Complete a new table for each ‘engagement barrier lens’
6. Overall benefits and negatives of proposed changes

Consider

<table>
<thead>
<tr>
<th>Strategy</th>
<th>+ and – for service</th>
<th>+ and – for consumers (including sub-groups)</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. online forum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.g. new website</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not enough rows? Print off an extra copy of this page for extra room.
7. Given the evidence generated in (6) regarding positive and negative impacts of any proposed change, does the logic identified at (3) hold true? Why?

8. If your service were to implement any change, what strategies would also need to be implemented to mitigate the negative impacts (for your organisation and for consumers)?

9. What further research will you undertake (and when) to revise your strategy and whether the goals you had at Stages 3 and 4 have held true. What monitoring and evaluation can you plan to undertake?

10. What further steps will you undertake to allow you to revisit the logic of your strategy at a later date and stay in touch with ongoing changes in communications?
Part 2: Guide to the Workbook

1. What is the scope of digital engagement strategies to be analysed with this tool?

‘Engagement strategies’ include any communication with, service delivery for, or other engagement with consumers or community members.

This question asks you to scope the strategies you want to examine with the Digital Equity Tool in order to define and position the area under examination within a broader policy or service delivery context.

The Southern Community Health Service is considering launching an online forum to engage diabetes sufferers in a facilitated peer support program. The online forum is part of a broader program of diabetes services, including medical and social support. The online forum will replace one of three weekly group support sessions currently offered to diabetes sufferers through the Service. The diabetes online forum will mirror the well-established youth mental illness forum which is also run through the service.

2. What is the logic for your current mix of consumer engagement strategies (digital or otherwise)?

This question asks you to describe the broad mix of strategies which are currently used to engage consumers, with a logical (i.e. evidence based, based on your community needs, or based in practice wisdom) rationale for each strategy and the mix of strategies.

The diabetes programs at the Southern Community Health Service engage consumers across three broad activities: medical services, diabetes education, and peer and social support. The mix of engagement strategies is currently by face-to-face appointment, or in face-to-face groups. Each of these is supported by pamphlets and the general Community Health Service website which advertise the services. All bookings are made by telephone. The logic behind the current mix is the assumption that service users like to build face-to-face connections at the centre with their health care provider and with other diabetes sufferers. The centre is geographically central and well known in the community, and so is easy to travel to. This results in a representative mix of consumer groups coming to the service (e.g. CALD and ATSI groups).

3. What is the logic for any proposed changes to the mix?

This question asks you to consider the logic behind the engagement strategy defined in (1). That is, what are the intended benefits, for whom, and by what mechanism will the benefits be achieved?

The Southern Community Health Service has noted the success of the online forum for youth mental illness sufferers. The forum has engaged young people who were not engaging in face-to-face peer support sessions. A similar online forum for diabetes sufferers is intended to reach a new group of diabetes sufferers. It is not clear whether there are users of the service who would like to participate in peer support but are currently unable to do so. However, the service assumes that there may be diabetes sufferers who prefer the anonymous nature of online forums, who
struggle to get transport to the centre for a group session, or who are time-poor and would appreciate a forum which they can participate in when it suits them. The loss of one face-to-face session per week to fund the online forum is a pragmatic decision based on budget constraints – the benefits are intended to outweigh the loss in service to current Thursday morning group participants.

4. Having identified any changes to the way you engage consumers, and the logic behind the change and its impacts, it is important to more carefully examine the evidence which underpins the change.

The following prompts are intended to guide the collection or generation of evidence to inform you analysis. Consider these questions around barriers to service engagement in relation to your population of interest. Your population is likely to comprise multiple sub-groups, so ensure that their different needs are considered (e.g. different age groups; different English proficiency).

Complete a separate table for each category of barriers with ‘known evidence’ or ‘no evidence’. Not all prompts will be relevant to your organisation. The list may not be comprehensive so please consider other barriers to engagement.

**Capacities and skills, for example:**
- What is the level of English literacy* or English proficiency in your population?
- What is the level of Health literacy* in your population?
- What is the level of Digital literacy* in your population?
- What do you know about the motivation/perceived need of your population to use certain engagement modes?
- Given the evidence for skills and capacities amongst your population group, who is likely to be able to functionally use each mode of engagement, and who is not?

*Define: English literacy, Health literacy and Digital literacy

**Physical and geographic access / availability (direct to service or to digital hardware/connection):**
- How is the service located relative to populations of interest?
- Does transport allow for equal access to the service (e.g. public transport)?
- Who in your population has access to digital hardware and an Internet connection?
- Is cost a factor behind hardware access and geographic access to service?
- How is the usefulness of different modes affected by mobility, physical difficulties such as poor vision or poor dexterity? E.g. does digital access overcome geographical distance?

**Appropriateness/acceptability:**
- What are the acceptable modes of engagement for culturally diverse groups?
- In what ways are modes of engagement relevant to different cultural or language groups?
- What methods are used to engage ‘hard to reach’ groups? Why?

**Service capacity/waiting lists:**
- Is there limited service capacity – do certain groups suffer disproportionate access barriers as a result?
- How does the mix of engagement modes influence wait-lists?
- Are services over-used by some groups? Why?
Areas for which there is ‘no evidence’ should be used as further prompts to generate relevant new evidence. This may involve simply talking to your population of interest or other practitioners.

### Example

<table>
<thead>
<tr>
<th><strong>Physical and geographic access / availability</strong></th>
<th><strong>Known evidence</strong></th>
<th><strong>No evidence</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. service location relative to population</td>
<td>- Central location with bus access.</td>
<td>- Which groups are not coming to the service at all because of service access barriers?</td>
</tr>
<tr>
<td></td>
<td>- But large geographic catchment area means bus access is poor for some groups.</td>
<td>- What % of older service users (and non-users?) would like to contact us digitally? Why? Would they be more likely to want digital contact if they were supported to learn how?</td>
</tr>
<tr>
<td></td>
<td>- 35% of households in the area do not have a private car.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- A survey of young people who use the service showed 80% would like to contact us digitally because it overcomes distance and is more convenient for them.</td>
<td></td>
</tr>
</tbody>
</table>

5. **Consumer engagement formats and specific barriers**

Review your organisation’s current or future mix of engagement modes by using the table.

Select an ‘engagement barrier lens’ from the dot points or other evidence generated in (4) and write it at the top of the table. These ‘lenses’ are to shape your thinking around specific impacts.

For each format in the left hand column, note how the selected ‘engagement barrier lens’ will impact on your population groups of interest.

**Example**

The new web-based diabetes support forum at the Southern Community Health Service will mean that the engagement barrier lens ‘Digital Literacy’ highlights for us that engagement will be ‘worse for’ those who don’t know how to get online, but ‘better for’ those who are highly digitally literate.

Physical access will be less of a barrier for those currently unable to attend the group because of transport, but will be more of an issue for those without physical access to a computer.

Cultural background may become less of an issue for diabetes sufferers who don’t like to talk about illness in public but who like the anonymity of online settings, but more of an issue for those whose English literacy is poor given that the online forum text and discussions will be in English.
6. **Overall positives and negatives of proposed changes**

Focusing on the changed engagement strategy identified in (1), (e.g. introduction of the online diabetes support forum and loss of one face-to-face group), what are the overall positives and negatives for both your service and for the consumer population of interest?

Consider aspects such as reach and accessibility, service utilisation, appropriateness, costs, and service quality.

The service sees an online diabetes peer support forum as a way of diversifying the engagement strategies for consumers. It has been a successful strategy for young people engaging with the service, and has demonstrated some cost savings for that program. It is hoped that if the diabetes group goes well then more online groups could be initiated for other health conditions. The major negative for the service is that staff have limited IT skills available to support this approach.

The big positive for consumers with an online diabetes group is the potential to engage those who don’t like the idea of a face-to-face group setting or who struggle to get transport to the service at the moment. This positive aspect is balanced by the loss of one face-to-face group. It is likely that given the analysis in (4) and (5), there is a significant proportion of people with diabetes in our area who are older (especially compared to the ‘youth mental illness’ program cohort used as a comparison), who don’t have an internet connection, and haven’t used a computer before, which will limit the applicability of the online group to the consumers with diabetes.

7. **Given the evidence generated in (6) regarding positive and negative impacts of any proposed change, does the logic identified at (3) hold true? Why?**

The purpose of this question is to re-examine the answer to (3) in light of the evidence generated through the digital equity tool. Ideally, even if your logic remains true, you will have generated a more detailed understanding of the likely impacts of any change in engagement strategy. If your logic does not hold true, either write down a refined logic OR a rationale for abandoning the proposal.

Revisiting the assumptions made in (3), it is now clear that the population of interest – people with diabetes in our area – are more likely to have barriers to using an online forum as compared to visiting the service for a face-to-face support session. They are likely to be older, more socially disadvantaged, less likely to be digitally literate, and also more likely to have English as a second language – all barriers to ‘going online’.

Nevertheless, there is some evidence to suggest that an online group may meet the needs of a small sub-group of diabetes sufferers in our area. In particular, those who struggle to attend the centre in person, those who are time-poor, those who are somewhat younger, and those who prefer to remain anonymous.
8. If your service were to implement any change, what strategies would be implemented to mitigate the negative impacts (for your organisation and for consumers)?

It is quite likely that the online diabetes support group will go ahead even though it has been identified that it is appropriate for only a small sub-section of our population of interest. In order to go ahead with minimal impact on the whole diabetes population, the service will conduct a needs analysis with existing consumers to ensure that the remaining two face-to-face support groups are held at the best times and days to suit consumers.

The service will also invest in supporting existing consumers to ‘go online’ by offering touch-screen kiosk style access to the online forum in the reception area, with on-site staff for support. Also, members of the face-to-face groups will be offered the chance to learn digital skills by partnering with another member in the group who can mentor them after the class at the kiosk to start participating in the online group.

9. If your strategy is implemented, what monitoring and evaluation will you plan to assess its achievement and to ensure ongoing improvement?

The service decided that the new online diabetes support group would be trialled for six months. They allocated the service manager the ongoing responsibility to implement an evaluation of the changes (during and at the end of the trial). This included organising a formal evaluation of the strategy. The evaluation was intended to identify what clients and staff thought worked well and what required improving, and whether the goals for clients and the service had been achieved. After six months, focus groups were held with clients using the online group at any time, clients from face-to-face meetings, and staff.

The evaluation showed that, as intended, some clients had really benefited from the online group; they enjoyed the convenience of getting support from home and liked the chance to chat more often than at a weekly meeting. One said they were only using the online group now and not attending face-to-face meetings any more. Two liked their online anonymity and had asked health questions they were embarrassed to ask face-to-face. Two new people had joined the online group after mentoring from existing users. Staff reported that the expected time and cost savings from running one less face-to-face group were taken up by the time needed to moderate online discussions.

Staff and clients reported generally low use of the touch-screen kiosk in reception. While most deemed its location not private enough to use, a few had found it useful to have staff support to help them start using it or if they encountered problems. A good number of clients who only attended face-to-face groups could not see benefits in the online group, lacked confidence with technology to ‘have a go’, did not speak or write English well enough to participate, or had no home Internet access. Two older male Italian clients said they were interested to ‘talk’ online to each other if some kind of sub-group could be set up.
10. What further steps will you undertake to allow you to revisit the logic of your strategy at a later date and stay in touch with ongoing changes in communications?

The service manager allocated responsibility to a small staff working group to keep in touch with ongoing changes in new technologies in the client community. Their role was to identify further opportunities for digital communication that might suit different client groups and deliver efficiencies for the service. This approach was intended to help them maintain an appropriate mix of online and offline communications and to ensure that those clients who were unable to ‘go online’ or did not feel confident or interested to do this, would still able to get a good-quality offline service.

The working group intended to stay in touch with technology changes and the needs of their client groups by initially undertaking Google searches, and planning for a needs assessment with clients in a year’s time. They also planned to work through the Digital Equity Tool again at that time, building in the new evidence from their evaluation and their experience from the first strategy.