Instructions for completing the Input Output data sheet

We suggest you print this sheet to have it available when completing the input output data sheet.

The cells marked with the light blue colour refer to the parameters which can be modified. All other cells have be locked and cannot be modified

Disclaimer

This model is intended to stimulate 'what if' scenario thinking among practice owners and primary care clinicians. Like all models, it is a simplified version of reality. Hence, the model outputs should not be relied upon solely to make financial investment decisions or resource allocations decisions. Sapere accepts no liability for any losses or costs incurred as result of decisions taken based on this model. We are happy to provide more in-depth assistance if you wish to a more detailed options analysis. Default values and settings in this spreadsheet are not intended to provide a benchmark for any particular model of care. No inferences should be made from the default settings and values.

Background

Patients First is working with the National Health IT board to develop support for practices to make effective use of patient portals. As one component of this work, Sapere Research Group was commissioned by Patients First on behalf of the National Health IT Board to model the impact of patient portal implementation on general practices costs and revenues. This work included a written report providing details about the process and results of the modelling, as well as conclusions about the factors which support successful ePortal implementation.

Sapere has tailored their model to allow general practices to explore different implementation scenarios directly. Output from the model details changes in a practice's revenue and cost flows following changes in various ePortal parameters. The model is intended to stimulate 'what if' scenario thinking, rather than provide advice regarding financial or resource allocation decisions.

Model design assumptions

The modelling in Sapere's written report included copious variables to reflect the complexity of activities performed in a general practice. However, the complexity of the variables distracts somewhat the underlying results derived from the modelling. Therefore, to ensure the widespread usability, yet meaningful interpretation of the modelled results, the required practice inputs have been simplified; with several additional parameters embedded into this model.

The embedded assumptions were derived from multiple sources of information, including stakeholder interviews and previous data collected by Sapere Research Group used to analyse nursing and medical workload and revenue patterns. This includes a detailed break-down of the types of activities, the time required by GP, nurse and admin staff to complete each activity, and the proportion of GP and nurse time allocated to each activity. Appendix 1 reports these in detail.

While the underlying assumptions may not completely reflect the operations of a specific practice, they do provide a reasonable benchmark to explore how the portal can be expected to influence the cost and revenue flows of a general practice. Particular attention should be given to the relative change in outcomes rather than the absolute value.

What you need

Before proceeding, the following information is required to populate the model:
- Age and gender details of enrolled population according to the most recent capitation quarterly PHO report
- Typical hourly rates for GP, nurse and admin staff
- The annual number of activities within the practice, broadly split between:

- ACC GP consults for patients aged 18+
- non-Non GP consults for patients aged 18+
- Repeat scripts for patients aged 18+
- Co-payments for:
  - GP consults for patients aged 18+
  - ACC GP consults for patients aged 18+
  - Repeat scripts for patients aged 18+

Note, since the portal is typically only available for adult patients the modelling should only consider patients 18+ years old.

General instructions
STEP ONE: Input instructions

1. Population

Enter the breakdown for your enrolled population by age and gender, according to the most recent capitation quarterly PHO report.

2. Staff rates

Enter the current hourly rates for GPs, nurses and admin staff.

3. Activity numbers

Enter the number of:
- ACC GP consults
- Non-ACC GP consults
- Repeat scripts

GP consults should be equivalent to the total consults minus nurse consults. Repeat scripts should equal the total number of repeat prescriptions prescribed by GPs

4. Co-payments

Enter the co-payments per consultation (inclusive of GST) by age group, type and whether the consultation is held with a doctor or nurse.

Note, the age groups have been structured to reflect the capitation age-bands. Co-payments may be the same for all 18+ year old patients.

STEP TWO: ePortal Parameters

The following parameters were identified to be critical for successful portal implementation:
- Patient uptake – percentage of practice subscribed/using the ePortal
- Clinical queries per patient – the average number of clinical queries per patient subscribed to the ePortal
- Consults avoided following online query – percentage of in-person consults avoided following an online query
- Lab enquires per patient – average number of lab enquires per patient for entire practice size
- Subscription fee – optional fee charged to patients subscribed to the ePortal

- Pay-as-you-fee – fee charged to patients per online clinical query with a GP
- Scripts subsidy – a subsidy applied to script co-payments for patients subscribed to the portal
- Fixed portal costs – fixed cost charged to practices for acquiring, licensing etc. ePortal services
- GP subscription investment – Yes/No option includes/excludes one-off GP time required to support and subscribed patients to the portal

The default values in the input output sheet reflect Sapere's assumptions of what a practice may typically expect following discussions with practices that had already implemented patient portals. However, these can be varied to represent different scenarios for practices.

STEP THREE: Output

The output table provides a breakdown of practices total revenue and total wage costs before and after portal implementation.

Total revenue is split between capitation revenue (capitation rates were valid from 1 July 2014) and activity revenue. Total wage cost is includes GP, nurse and admin staff wages. Net revenue is calculated to determine the change in in practices finances following portal implementation.

The calculated FTE for GPs nurse and admin staff before and after portal implementation are also presented; where staff FTE is calculated based on the total number of activities reported in the inputs. This calculation helps

Appendix 1

The model first breaks-down the total number of GP consults into specific activities. Table 1 summaries the consultations break-down according to the proportion of total consults and the associated average fee.

Table 1 Consultation break-down

Type of Consultation	Percentage of Total Annual Consultations
Stable Chronic	25%
Acute	25%
Unstable Chronic	19%
Preventative Screening	14%
Trauma	11%
ELL/Community	5%
Procedure Surgery	2%

Other activities, such as immunisations, were assumed independent of the number of consults and instead calculated as a percentage of the enrolled population. Importantly, these activities are unlikely to be effected by patient portals and for simplicity were omitted from the variable inputs. In contrast, the number of repeat scripts and lab result enquiries (also assumed independent of the number of consults) were included in the variable inputs for this model because it is likely the portal will increase practices' efficiency in delivering these activities.

Assumptions were made around the percentage of time GPs, nurses or both performed each of the above activities before and after portal implementation. Table 2 presents the percentage of time GPs, nurses or both performed each of the above activities in the status quo. Table 3 presents the percentage of time GPs, nurses or both performed each of the above activities with patient portals.

Table 2 Status quo – activity allocation

Type of Consultation	GP only	Nurse only	Both
Stable Chronic	50%	5%	45%
Acute	50%	5%	45%
Unstable Chronic	50%	5%	45%
Preventative Screening	50%	5%	45%
Trauma	50%	5%	45%
ELL/Community	50%	5%	45%
Procedure Surgery	50%	5%	45%
Scripts	0%	0%	100%
Lab results	0%	0%	100%

Table 3 ePortal – activity allocation

Type of Consultation	GP only	Nurse only	Both
Scripts	100%	0%	0%
Lab results	0%	20%	80%
Online clinical queries	100%	0%	0%
Unavoidable consults	50%	5%	45%

The percentage of time allocated to stable chronic, acute, unstable chronic, preventable screening, trauma, ELL/community and procedure surgery were omitted from Table 3 because they were assumed unchanged

from the status quo. Following portal implementation, it is assumed GP's can complete repeat scripts directly, as well as all online clinical queries, and nurses have more independence reporting patient lab results.

Finally, assumptions were made for the time required to complete each activity before and after portal implementation. Table 4 outlines the time required to perform each activity in the status quo model. Table 5 outlines the time required to perform each activity in our ePortal model.

Table 4 Status quo – time per episode

Type of Consultation	GP	Nurse	Admin
Stable Chronic	15	15	5
Acute	15	15	5
Unstable Chronic	15	15	5
Preventative Screening	15	15	5
Trauma	15	15	5
ELL/Community	15	15	5
Procedure Surgery	15	15	5
Scripts	2	5	9
Lab results	5	12	3
Booking appointments	0	0	5

Table 5 ePortal - time per episode

Type of Consultation	GP	Nurse	Admin
Scripts	2	0	2
Lab results	2	5	2
Booking appointments	0	0	2
Online clinical queries	5	0	0
Unavoidable consults	12	12	5
Subscription and support	2	0	5