



## **Summary: HARP Risk Calculator**

This document provides a summary of the Western HARP risk calculator designed to determine the overall risk of a person presenting to hospital for services. The calculator has been designed around available evidence where it exists. It is based on the extensive work done with the Westbay diabetes project. Included in this document, is a summary of each section of the calculator with an explanation of the rationale and guidelines on how the section is to be completed when using the tool. The reasons for each section are described, and where supported by a body of literature, this has been stated.

The calculator aims to determine the risk of people with chronic or complex care needs presenting to hospital for treatment in the following 12 months and defines the entry point for HARP services. The risk screen is based on presenting clinical symptoms, service access profile, self-management, and psycho-social issues. This screening categorises a person into one of four risk categories, (low medium, high and urgent).

The calculator helps service providers determine eligibility for HARP services, by quantifying a person's risk of acute presentation. It is used following a full assessment by the treating clinician.

Purpose of the calculator:

- A tool for measuring the risk of acute presentation in the next 12 months.
- Determines the entry point for HARP.
- Forms the basis of triage for the HARP staff

### Reviewing the calculator

The calculator has been developed from the original Westbay / HARP diabetes risk calculator, this document has been revised and updated as part of the continuous improvement methodology of the HARP program. Working parties of clinicians will be invited to discuss the presenting issues and advise on recommendations for changes. The calculator will then undergo a trial period with a sample of 50 HARP patients.

References : Case finding Algorithm for pts at risk of re-hospitalisation, Kings Fund 2005

VCCCP Eligibility flowchart and risk screening tool, 2005

CALCULATOR ITEM	RATIONALE and GUIDELINES FOR USE														
PART A: CLINICAL ASSESSMENT															
<p>1. Presenting clinical symptoms</p> <table border="1"> <tr> <th colspan="2">1. Presenting Clinical Symptoms</th></tr> <tr> <td>Diagnosis of Chronic Respiratory condition such as COPD, Paediatric asthma</td><td>1</td></tr> <tr> <td>Diagnosis of Chronic Cardiac condition such as CHF, Angina</td><td>1</td></tr> <tr> <td>Diagnosis of Complex care needs in frail aged such as dementia, falls, incontinence</td><td>1</td></tr> <tr> <td>Diagnosis of Complex care needs in people under 55yrs such as mental health issues</td><td>1</td></tr> <tr> <td>Co- morbid diagnosis of diabetes and/or renal failure and/or liver disease</td><td>1</td></tr> <tr> <td>Rate the impact these factors have = Score</td><td>/5</td></tr> </table>	1. Presenting Clinical Symptoms		Diagnosis of Chronic Respiratory condition such as COPD, Paediatric asthma	1	Diagnosis of Chronic Cardiac condition such as CHF, Angina	1	Diagnosis of Complex care needs in frail aged such as dementia, falls, incontinence	1	Diagnosis of Complex care needs in people under 55yrs such as mental health issues	1	Co- morbid diagnosis of diabetes and/or renal failure and/or liver disease	1	Rate the impact these factors have = Score	/5	<p><b>Rationale</b></p> <p>The presenting clinical picture records the diagnosis of presenting clinical symptoms.</p> <p>Presenting clinical symptoms are grouped into five risk categories. The criterion for each category has been determined by the HARP streams of care : Respiratory, cardiac, Complex care frail aged and psychosocial streams, anecdotal evidence from HARP clinicians has identified the co-morbid diagnosis of diabetes with the other diagnosis as an increased risk.</p> <p>The diabetes stream is covered with the existing diabetes risk calculator</p> <p><b>Guidelines for use</b></p> <p>Clients are assigned one or more risk category and the corresponding score, determined by the treating health professional's assessment.</p>
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PART B: FACTORS IMPINGING ON SELF-MANAGEMENT																															
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## 6. Self-management impact

6. Readiness to change assessment	
No capacity for self-management (cognitive impairment; end stage disease)	4
Pre-contemplation (not ready for change)	3
Contemplation (considering but unlikely to change soon)	3
Preparation (Intending to take action in the immediate future)	2
Action (Actively changing health behaviours but have difficulties maintaining plan)	1
Maintenance (Maintained behaviour for ≥ 6 months)	1
Relapse (A return to the old behaviour)	3
Score	/ 4
<b>TOTAL SCORE FOR PART B</b>	<b>/ 19</b>

### Guidelines for use

A score is given according to the corresponding stage of readiness identified. This is determined by the treating health professional's assessment. Clients are assigned one category scoring a possible total of 4 points.

Scores have been weighted according to the likelihood of the person engaging in behaviour change. For example, people in pre-contemplation score higher as they are far less likely to engage in change and hence manage their condition.

Scores are not graded; rather each stage is given the score indicated, giving a maximum score of 4 points. This is based on the assumption that the more resistant to change a person is, the higher their overall risk due to sub-optimal self-management.

### Rationale

Evidence supports the benefits of self-management. Effective self-management involves managing the day-to-day tasks of having a chronic illness. The degree to which people are confident and able to manage this will have a significant impact on their health outcomes as demonstrated in research.

A readiness to change assessment has been used to determine self-management impact using the Transtheoretical Model (TTM). The TTM illustrates a process for behaviour change and identifies five main stages that describe the state of readiness to make health behaviour change. This model is used to enhance a person's intrinsic motivation to change and can therefore be used to enhance self-management.

This section enables clinicians to determine a person's readiness to engage in health behaviour change. The assumption is that people who are not ready for change are more likely to develop worsening risk factors as they are less likely to engage in the necessary health behaviours required to manage their disease.

## PART C: RISK PROFILE

## 7. Risk profile

Calculate the new risk profile by adding PART A and B	
Total Score for A and B	/49
Level of Risk	Score
Urgent	39 - 49
High	24 - 38
Medium	11 - 23
Low	1 - 10

### Rationale

This section provides a guide on how soon a client should be assessed by the HARP staff based on their risk of presenting to hospital.

### Guidelines for use

The scores for parts A and B are added together to give a total score. The overall risk of the person is determined by the total score, which corresponds to one of the four risk categories. The ranges for each risk category were based on a trial of 50 patients. The trial demonstrated the need for the high risk category to commence at 24 to more accurately capture those who were clinically felt to be at higher risk and therefore requiring HARP services sooner.