



MINISTRY OF HEALTH
SINGAPORE

CareTeam Education Playbook on Person - Centred Communication





Contents

Foreword: Prof Tai E Shyong	3
Foreword: Prof Timothy Skinner	4
Preface	5
Person-Centred Communication: Definition, Competencies and Training Design	7
Using the Rubric and Guidelines for Feedback	16
OARS Framework	19
Biopsychosocial Assessment	21
Teach-Back	27
SMART Goals and Problem-Solving	31
Interprofessional Collaboration	36
Acknowledgements	38
Annex	46



Foreword

Prof Tai E Shyong

Chair, Care Team Education Workgroup Senior Consultant,
Division of Endocrinology, National University Hospital

I wish I could say I am an expert in patient-centered communication. The truth is, I am not. My career followed a largely conventional path up to specialist accreditation, and then I became a clinician scientist. I worked first in epidemiology and then in the genetics of chronic diseases like diabetes, hypertension and hyperlipidaemia. In 2010, when I was asked to head the Division of Endocrinology at the National University Hospital, I realised that most of what I learnt in over a decade of research was not making any difference to the burden of disease.

Fortuitously, one young registrar in my division headed to Dundee for his Health Manpower Development Programme, where he was supervised by someone introducing the Year of Care to Scotland. He came back brimming with excitement about transforming the care for patients living with diabetes so that they could feel empowered to manage their own health. It took me over two decades in healthcare to remember the reasons I became a doctor. When I was a medical student, I marvelled at the ability of a family physician in Scotland to care for a patient over a lifetime, understanding their needs and offering counsel and comfort, when curative treatments were not necessarily available.

Much of that was lost until, suddenly, I needed to form new and meaningful connections with my family at work and at home (with a young child), and I needed to bring that same mindset to the clinic. Thus began my own learning journey in patient-centred care. I learned to look at things through the eyes of others and realised all humans live in complex environments where we make hundreds of decisions every day. The inability to see how these factors influence our behaviours leads to blind spots that can result in decisions that are detrimental to our health. This helped me see that non-compliance or non-adherence on the part of our patients is not their failure, but the failure of the healthcare system to engage them in a manner that is meaningful to them.

Through all this, I had the great fortune to find like-minded individuals to journey with, including Yew Tong Wei at the National University Hospital, Ho Anqi from MOH and Timothy Skinner, who has vast experience in this area and helped me think about patient-centred communication from first principles. Then there was the amazing Care Team Education workgroup who came together to co-create something we all believe in. The training framework we have built is not an end in itself. It represents the start of a journey through which we form a community of individuals who value our interactions with each other and with our patients. Let us not forget the importance of making human connections, and our ability not just to heal, but to bring comfort and happiness to the lives of the individuals who come to us for care.



Foreword

Prof Timothy Skinner

Professor of Health Psychology, Institute of Psychology, University of Copenhagen

In 1991 I undertook my first research in diabetes, listening to the stories of teenagers with type 1 diabetes, for my undergraduate honours thesis. From this work, I won a scholarship for a PhD looking at how the social world of teenagers shaped how they manage their diabetes. I started that journey believing that I just needed to provide the teenagers with the social skills they needed. I continued to do my research, seeking to understand how people thought about and understood their diabetes, how their social world shaped their thoughts, feelings and actions, and how healthcare professionals (HCPs) communicated with their clients about their diabetes. I read a lot, and some authors I read repeatedly, like Richard Rubin, Bon Anderson, Bill Polonksy and Larry Fisher. Most importantly, I started seeing people with diabetes as a psychologist, trying to help them, individually or through facilitating groups.

All this taught me that trying to force my agendas, my solutions and my goals on people with diabetes did not make a blind bit of difference to them. In fact, this broke all the work I did on building a working alliance with them. As I reflected on my frustrations as an unskilled helper, and the lessons I was learning from my research, I had the opportunity to talk these through over several meetings with Bob Anderson and Anita Carlson, and I attended one of their workshops. This gave me the insight to see that there is only one reality, that of the person with diabetes. They are managing their diabetes, the best they can, given their understanding, resources and contexts (personal, social, cultural, financial). If I wanted to be a skilled helper, I needed to work with the person living with diabetes on their goals and priorities in ways that build success from their perspectives, not on the goals I have for them, or on the solutions I think are best for them. This switch from diabetes-centred care to person-centred care enabled me to build enabling working relationships with my clients, and to work with like-minded colleagues to develop programs (DESMOND) that enabled people with diabetes, and reduced the frustration that HCPs feel when people “don’t do what they are told”.

Person-centred care is the only approach that is congruent with the realities of a self-managed condition. It is, in my view, the most effective evidence-based skilled helping model. My hope for the future is that as the skills and values of person-centred care become embedded into the culture of healthcare, people living with diabetes would look forward to their interactions with HCPs and HCPs would find delivering care energising and rewarding.



Preface

In November 2017, 76 Singaporeans formed the first Citizens' Jury of Singapore to deliberate on strategies for the War on Diabetes. They recommended better equipping care team members with effective communication strategies to bolster motivation and tackle the biopsychosocial aspects in managing diabetes. Around the same time, the Ministry of Health (MOH), the Agency for Integrated Care (AIC) and the Health Promotion Board (HPB) underwent the design practitioner programme conducted by the Public Service Division (PSD) Innovation Lab to better understand stakeholders' context and needs through in-depth interviews with persons living with diabetes, their families and HCPs.

The findings emphasised that encouraging persons living with diabetes **to make and sustain positive behavioural changes needs to take into account the context of their lives and has to be aligned with the individual's values and beliefs**. The importance of person-centred communication (PCC) cannot be overemphasised – without it, it is difficult, if not impossible, to strengthen trust and respect between the care team and the patient. The **relationship between the care team and the patient can inspire and strengthen** the patient's resolve to manage their condition better. Beginning with identifying the patient's presenting issue or concern accurately and ending with empowering the patient to take the next step towards better health, it is important for the patient to be an active participant in the person-centred consultation. The proportion of talk-time that the patient has is often a good reflection.

These qualities in the clinician-patient relationship are fundamental in improving biomedical markers and achieving outcomes that are meaningful to patients. The Care Team Education Workgroup (CTE WG) was set up to identify the (i) key components of the national CTE framework for PCC, including competencies and techniques, and (ii) training features that would facilitate deep learning to increase learners' retention of concepts and motivation for application.

A summary of the key components:

- a. A **biopsychosocial perspective** is fundamental to PCC – these factors are reciprocally inter-connected and recognising them facilitates a more holistic clinician assessment;

- b. An effective application of the **OARS (open questions, affirmations, reflections, summaries) framework** helps demonstrate the care team member is actively listening to patients' views and needs;
- c. **Teach-back** is a method to confirm the patient's understanding in a non-judgmental way;
- d. **Setting SMART (specific, measurable, action-oriented, realistic and time-limited) goals** helps patients to problem-solve and plan steps that are manageable;
- e. **Interprofessional collaboration** – role clarity and good communication between care team members is important for safe and quality care, and in supporting patients to achieve their health goals.

From the findings of the CTE WG trial training sessions^[1], we have put together this Playbook to support the following groups of healthcare professionals:

- a. Healthcare leaders who have oversight of training for their teams particularly those who are looking at professional-to-patient communications as well as inter-professional communications;
- b. Healthcare professionals who have a keen interest to learn more about person-centred communications and incorporate into clinical journeys;
- c. Healthcare professionals in both public and private healthcare settings, especially primary care where health planning is a critical component.

This Playbook provides an example of a curriculum, training pointers and specific areas where learners may require greater guidance. It is not intended to be prescriptive, and readers can choose to adapt the materials to suit their learners' needs and own contexts. The Playbook's content, although focused on diabetes, is highly relevant to the management of other chronic conditions. While the Playbook is targeted at PCC champions and trainers, it is hoped that care team members will also find this a useful resource as they build enduring relationships with patients and support them in managing their conditions.

^[1] The training builds on existing clinical communication training content, which includes in-house training in public healthcare institutions and private providers.

Person-Centred Communication: Definition, Competencies and Training Design

What is Person-Centred Communication?

Person-centred communication (PCC) is made up of practices^[2] that create or reinforce trust and mutual respect in the clinician-patient relationship, and where patients actively participate in the conversation and decision-making process. These practices include sharing explanations and options in ways the patient understands to create a shared understanding of the problem and courses of action. Through PCC conversations, the patient's perspective (e.g. beliefs, preferences, concerns, needs) are revealed. Such conversations produce decisions informed by evidence, that are consistent with patient's values, and feasible to implement.

PCC places a greater emphasis on the person's emotions, values and social contexts compared to traditional communication frameworks used in healthcare that focus on biomedical aspects of patients' presenting issues. Adopting a **biopsychosocial (BPS)^[3] perspective is fundamental** to PCC – It recognises that biological (e.g. genetic, biochemical), psychological (e.g. mood, personality, thoughts, feelings, behaviour) and social (cultural, familial, socioeconomic, spiritual) factors are reciprocally inter-connected and explains the development of chronic illness, with or without mental health issues. When BPS factors are integrated in clinician's assessment, a more comprehensive and holistic explanation of what contributed to and maintained the issues is derived. The benefit of going beyond the biomedical approach is that the care team member understands better their patients' perspectives, i.e., how they think and feel about their chronic illness, how they may be affected by or inspired by people they live or interact with at home or at work, and how these may influence their choices of helpful or unhelpful behaviours for managing their chronic condition.

This approach of assessing the patient's issues is essential for care team members to understand their 'whole' patient, to develop relevant treatment solutions in the immediate, intermediate and longer-term. Without this approach, interventions may be compromised. Over time, the perpetuation of unhelpful factors lead to more complications and challenges, contributing to higher resource and economic burden.

^[2] Adapted largely from models offered by Mead & Bower and Epstein & Street. Street R. L. Jr. (2017). The many "disguises" of patient-centered communication: problems of conceptualization and measurement. *Patient education and counseling*, 100 (11), 2131-2134.

^[3] The biopsychosocial model was proposed by American psychiatrist and internist named Dr. George Engel in his paper "The need for a new medical model: A challenge for biomedicine" in the *Journal Science* in 1977.

Here is an example to exemplify the applications of the BPS model: A patient who did not take his medication as prescribed might have a genetic predisposition (biological factor) for depression and mood issues. He also faced fears and uncertainties about the effects of medication, explained by an erroneous belief that taking the medication would eventually lead to severe side effects (psychological factor). He felt embarrassed about taking the medication while at work due to his peers' reactions (social and psychological factors), as well as faced family concerns and differences about his dietary habits and lifestyle habits (social and psychological factors).

In such an example, simply asking the patient to remember to take the medication and suggesting ways to help him remember to do so, for the sake of his own health would not address the barriers he faces. Thus, the consultations will not achieve the desired treatment outcomes.

On the other hand, a care team member who adopts a BPS approach in clinical assessment will be aware of the multiple factors that impact the patient's behaviours. He can help the patient understand the factors leading to his or her challenges with taking the medication. When successful, this can help the care team member and patient develop relevant goals and interventions to address the underlying difficulties. In addition, problem-solving could be integrated with PCC, facilitating the partnership with the patient, while providing useful information. In the case example above, it could be eliciting and reinforcing strategies the patient had employed successfully to manage peer pressure in other life areas or sharing practical tips to address anxiety, or on ways to pair medication-taking with another regular activity.

Competencies to Facilitate Person-Centred Communication

The CTE WG identified the following **competencies**:



- I. Understand how **bio-psycho-social factors**, within relevant contexts, **interact mutually** and impact the persons-system-professional interactions, person's understanding of what contributes to and maintains their issues and person's ability to manage their chronic conditions;



- II. Assess and talk about bio-psycho-social factors, within relevant contexts, in ways **that engage, facilitate, and activate helpful behaviours** for the person living with chronic conditions;



- III. Identify patient/ client's **priorities** and **values** to **set health goals** and/or **make decisions** that are important to them and for improved health outcomes;



- IV. Identify and **reinforce** patient/client's **strengths** and **capabilities** to increase self-efficacy in self-management;



- V. Use strategies to **work with patients/ client's ambivalence** and **resistance** towards what they value and for improved health outcomes;



VI. Identify **learning priorities** and **needs** of patients/ clients;



VII. Use **layperson language** to increase patient/ client's **health literacy** through conversations;



VIII. Use strategies to **evaluate** the **patient/client-provider communication** and **patient/client understanding** in a **non-judgmental way**;



IX. **Learn with, from and about other members of the care team** to provide better interdependent patient-centred care; and



X. **Recognise** the **importance** of **continuous patient-centred care** and **identify** possible **strategies to sustain** such **practice** in one's care setting.

Training Design

While PCC competencies and techniques are generally easy to understand in theory, PCC conversations are often not intuitive. Hence the CTE WG put together two videos^[4] to illustrate how patients may think and feel in a consultation where the care team member may not sense anything amiss. Scaffolding and the use of **positive performance feedback**^[5] in training are crucial to improve a care team member's confidence in applying these techniques, especially at the beginning.

Once a care team member has experienced success using these techniques across common challenging scenarios, using PCC usually saves time. The care team member is now more likely to elicit important information from the patient within a few minutes and steer the conversation to maintain relevance to consultation objectives while deepening rapport and demonstrating respect for the patient's values and concerns. Pertinent information would facilitate robust assessments that identify factors that keep difficulties going, lead to the formulation of more effective interventions to manage these difficulties and could reduce frequency of follow-up consultations.

^[4] These videos help with mentalisation, the ability to understand patients' mental states, which includes their thoughts, feelings and motivations (available in [Annex](#)).

^[5] Based on Self-determination Theory.

The reference curriculum (in **Annex A**) for PCC was developed through **rapid prototyping (trial training sessions)** to identify ways to help learners improve their confidence with application. **Observations** of trainer-learner interactions and regular **feedback from trainers and learners** helped to refine training materials and methods. The key recommendations, which are aligned with the Institute of Adult Learning's six principles of learning design^[6], are elaborated below. It is worth highlighting that these recommendations are relevant to the interactions between care team members and patients too. Psychological and social barriers exist for learners to implement PCC, just as they exist for patients trying to live with chronic diseases, and these principles help practitioners cross over.

Modules with more complex content, such as BPS assessment, require more scaffolding to help learners understand and apply the concepts and skills step by step. The focus shifts towards greater proficiency where learners had some exposure through previous training courses, such as OARS, teach-back or goal setting, and were more familiar with these seemingly simple concepts or skills introduced.

For such modules, the focus is on tightening the skills application and deepening practice to ensure integrity and effectiveness of the process. Integrating across different modules, i.e. how these concepts and skills come together in a consultation (theory integrated with practice), and applying these in synergy in common challenging scenarios increase learners' confidence in applying PCC skills^[7].

^[6] Institute of Adult Learning. (2020). The Six Principles of Learning Design: Designing Learning for Performance. Bound, H., & Chia, A.

^[7] Institute of Adult Learning. (2020). Moving from Fragmented to Seamless Learning Experience in Blended Learning Environments. Bi, X., Bound, H., & Mohamed, F.

The following recommendations identified from trial trainings informed the reference curriculum's design

1. Use real-world work practices or experiences^[8]



- Allow learners to experience PCC through trainers using/ modelling the same PCC skills (e.g. use affirmations/ praise and reflections, ask permission to share information). This helps learners to get their own “aha” moments.



- Use personal experiences and a variety of real challenging work cases to allow learners to make sense of real-world complexities and improve their ability to resolve unfamiliar problems in future. Tapping on learners' emotions can help elicit challenging scenarios more easily^[9]. For example, “Think of a patient that makes you feel ‘blah’. What is the patient seeing you for? Describe what happened. What were your fears and concerns?”



- Involve different members of the care team to mirror current realities of working in a multi-disciplinary team and to enhance peer sharing.

2. Help learners see the whole picture^[10]



- Learners shared that it was important for them to understand, at the start of training, how the learning objectives (e.g. skills and mindsets to be acquired in the rubric), activities (e.g. module content and activities, such as role-plays) and assessment (e.g. guidelines for feedback to be provided during role-plays) come together.

^[8] This aligns with learning design principles “authenticity”, “holistic” and “future-orientation”.

^[9] Bi, X. F. (2015). Teacher questioning in Singapore classrooms – a corpus-based investigation. [PhD thesis, National Institute of Education, Nanyang Technological University].

^[10] This aligns with learning design principle “alignment”.

3. Reduce cognitive load



- Keep sessions short. In the reference curriculum, each session will take about three hours, with two breaks to keep energy levels up.



- Provide brief pre- and post-session materials to reinforce session's key learning points without overwhelming the busy care team member. In-depth materials to be optional reading.



- Teach one, practise one. Introduce materials in short segments, with step-by-step examples to avoid overwhelming learners during practice.



- Instructions should be written on slides or handouts to ensure that learners are able to follow instructions to complete activities. Use a sufficiently large font size to meet learners' visual needs.



- Where possible, use simple activities, such as copy-paste exercises and MCQs.



- Provide scribes for more complex activities, such as those that require typing or complex navigation, where possible. This allows learners to spend time discussing, instead of typing or figuring out the interface. This can be minimised by using similar platforms across modules, such as Google documents which most learners were comfortable with.

4. Include multi-source feedback and opportunities to act on feedback^[11]

- Sequence activities to provide repeated opportunities for learners to practise the skills as they build on top of each other. The reference curriculum provides examples to do so.
- Multi-source feedback
 - Include self-reflections (feedback from the self)
The curriculum invites learners to audio-record and evaluates their performance between sessions. The rubric can help bring structure to this process.
 - Role-play in trios to create observer role (feedback from peers)
This provides more cognitive space for the observer to focus on the interactions as a third party to provide positive performance feedback on dynamics that learners involved in the role-play might not be able to pick up.
 - Have enough trainers during small group role-plays (feedback from trainers)
This is most helpful at the beginning as learners shared their sense of inadequacy at providing feedback during role-plays as peers. Watching a trainer provide feedback also helps to increase learners' confidence to do the same.
 - Have regular ongoing consultations to facilitate multi-source feedback. A higher frequency at the beginning would quicken the learning and mastery process.
- Increase learners' confidence to provide good feedback
 - Use the rubric and guidelines for feedback to direct learners' attention to pertinent areas for feedback during role-plays.
 - Both trainers and learners provide positive performance feedback to enhance strengths and improve weaknesses while minimising defensiveness.

The next chapter will offer pointers on how trainers can equip learners to provide positive performance feedback with the rubric and guidelines for feedback, as this will be a critical component for improvement.

^[11] This aligns with learning design principles "feedback" and "judgment".

Using the Rubric and Guidelines for Feedback

During the interviews with HCPs under the War on Diabetes as well as the trial training learners, those who had undergone brief PCC courses shared that they were uncertain if they were practicing the skills as intended. During the trial trainings' role-plays, learners shared that they were not confident that they had provided useful feedback to their peers. Useful feedback provision allows learners to understand if skills were appropriately adopted^[12]. The feedback-provider is also able to reflect on and improve his own communication skills.

Learners suggested sharing the rubric and guidelines for feedback upfront to provide a roadmap of what would be covered in the course and to set expectations. Together with A/Prof Doreen Tan (National University of Singapore, Department of Pharmacy), Ms Koh Sei Keng (Singapore General Hospital, Department of Pharmacy) and Mr Louis Chan^[13], the CTE WG developed the first version of a rubric with concrete behaviours (see **Annex B**), and guidelines for feedback, to increase learners' confidence in identifying and implementing the skills^[14]. The rubric is organised by modules, competencies^[15] and stages of learning (Beginner, Learner, Practitioner and Master). When introducing the rubric to learners, first direct learners to the Practitioner column (see **Table 1** for an illustration using C1 BPS's stages of learning). The Practitioner column contains what graduated learners who have a firm grasp on the skills introduced in the course should be able to identify and demonstrate. Key words were bolded for easy reading. The columns adjacent to the Practitioner column would have key differences from the Practitioner column bolded for contrast. Similarly, differences between the Learner and Beginner columns were bolded in the Beginner column.

^[12] Uhm, S., Lee, G. H., Jin, J. K., Bak, Y. I., Jeoung, Y. O., & Kim, C. W. (2015). Impact of tailored feedback in assessment of communication skills for medical students. *Medical education online*, 20(1), 28453.

^[13] Chan, L.J.W. (2021). Development of a rubric to assess the competencies for Person-Centred communication under the Care Team Education Framework (MOH). [Final Year Project, National University of Singapore, Department of Pharmacy].

^[14] Rathel, J. M., Drasgow, E., & Christle, C. C. (2008). Effects of supervisor performance feedback on increasing preservice teachers' positive communication behaviors with students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 16(2), 67-77.

^[15] Included only 7 of 10 competencies. The remaining competencies are more theoretical/ philosophical, i.e.

- Understand how bio-psycho-social factors, including cultural contexts, interact and impact on the persons-system-professional interaction and the person's ability to manage their health condition
- Learn with, from and about other members of the care team to provide better interdependent patient-centred care
- Recognise the importance of continuous patient-centred care and identify possible strategies to sustain such practice in one's care setting

Table 1: Rubric: Stages of Learning for C1 BPS

Stages of Learning			
Beginner	Learner	Practitioner (Graduated Learner)	Master
<ul style="list-style-type: none"> • Did not use lay language 	<ul style="list-style-type: none"> • Some use of lay language, intermittent use of medical terms without 	<ul style="list-style-type: none"> • Consistently used lay language 	<ul style="list-style-type: none"> • Used patient’s own words, matched patient’s language use
<ul style="list-style-type: none"> • Focused on care team’s agenda 	<ul style="list-style-type: none"> • Mostly focused on care team agenda • Identified patient’s presenting issue inaccurately, and/ or was wordy 	<ul style="list-style-type: none"> • Focused on patient’s presenting issue • Identified patient’s presenting issue accurately and was occasionally wordy 	<ul style="list-style-type: none"> • Focused on patient’s presenting issue • Identified patient’s presenting issue accurately and concisely
<ul style="list-style-type: none"> • BPS questions were directed at care team’s agenda 	<ul style="list-style-type: none"> • Asked BPS questions that were mostly not directed at patient’s presenting issue 	<ul style="list-style-type: none"> • Assessed BPS factors tied back to patient’s presenting issue 	<ul style="list-style-type: none"> • Assessed BPS factors tied back to patient’s presenting issue and care
<ul style="list-style-type: none"> • Did not ask about values • Offered personal views on what patient communicated about the presenting issue or themselves 	<ul style="list-style-type: none"> • Did not ask about values 	<ul style="list-style-type: none"> • Identified values 	<ul style="list-style-type: none"> • Identified values and tied back to the patient’s presenting issue and care team’s agenda
<ul style="list-style-type: none"> • Did not put together what the patient said about patient’s presenting issue 	<ul style="list-style-type: none"> • Did not put together what the patient said about patient’s presenting issue 	<ul style="list-style-type: none"> • Put together what the patient said about patient’s presenting issue 	<ul style="list-style-type: none"> • Put together what the patient said about patient’s presenting issue concisely and tied to care team’s agenda

The guidelines for feedback are mapped onto the rubric, using module and rubric numbers (C1 to C7), and sequenced according to a possible initial consultation. Responding to often-asked questions “what should I say?” and “how can I start?”, examples and areas to look out for were provided in the guidelines to help learners visualise the skills in the application (see **Table 2** for an illustration using C4 Teach-back “Ask permission to provide information or share more”).

Table 2: Guidelines for Feedback: C4 Teach-back “Ask Permission to Provide Information or Share More”

Item	Example	Things to look out for/avoid
Ask permission to provide information or share more	<ul style="list-style-type: none"> • May I share...? • Others have found XXX was helpful for them. Is it okay if I share more with you? 	<ul style="list-style-type: none"> • This is on patient’s area of focus. Note that many patients will say “yes” out of courtesy when you ask if you can provide information according to care team’s agenda. • As much as possible, leverage on what patient values, instead of fear, to motivate patient.

Providing feedback using the rubric and guidelines

In the reference curriculum, “introduction part 1” introduced a simple way to provide feedback and to ease learners into routine feedback giving and receiving: (i) “I like” as a cue to provide positive feedback; and (ii) “What if” as a cue to provide a specific suggestion to improve an area that was lacking or could be improved. Subsequent sessions expand on this by using Positive Performance Feedback (PPF), which includes stating the specific positive behaviour and outcome to encourage learners to repeat these specific behaviours. An example of PPF consist of a few components and may sound like, “You have recognised when the conversation was going off-topic (simple positive feedback^[16]). When you interrupted him to summarise what happened and tied what was important to him from the story to his presentation at the clinic (behaviour), the patient appeared satisfied and began to pay attention (outcome).”

To encourage learners to practise PPF in “introduction part 1”, “psychological insulin resistance” was included as many HCPs find conversations to encouraging patients to initiate insulin therapy challenging and there are specific things to look out for in such conversations^[17]. The remaining chapters will cover essential PCC skills.

^[16] Based on Self-determination Theory. Lecture materials on PPF cover different types of feedback.

^[17] Role-plays with feedback are included in [Annex](#).

OARS Framework

Taken from Motivational Interviewing, OARS is an acronym that is made up of: **Open questions (O); Affirmations (A); Reflections (R); Summaries(S)**^[18]. The effective application of OARS helps demonstrate that the care team member is listening. **A common sequence includes an open-ended question to elicit more information from the patient, followed by a reflection of what the patient said (or meant). A summary can be provided throughout the consultation to highlight key areas discussed or to put together a coherent account to enhance the patient's understanding or a transition to goal setting (by highlighting patients' motivation for target behaviours), especially when many things were discussed during the consultation.**

Learners often worry that they would “open a can of worms” with open questions. Yet open-ended questions are key in offering a directional path in conversations (e.g. what, if any, are your concerns about your smoking? What aspects of your care are you most happy with? What in your care do you feel could be fine-tuned to improve your HBA1c?). **Affirmations, reflections and summaries can also be used to steer conversations.** For example, “Mr Tan, you were saying (e.g. reflect key content and emotions)... Before we continue, let's talk about (e.g. clinical content of interest reflected earlier) a little more...” To a patient who repeats a sad story, care team members can reflect on the patient's strength before transiting, e.g. “I know you are in a lot of pain from the accident and I want to thank you for coming to our appointment so faithfully! Let's see how your blood pressure is going...”

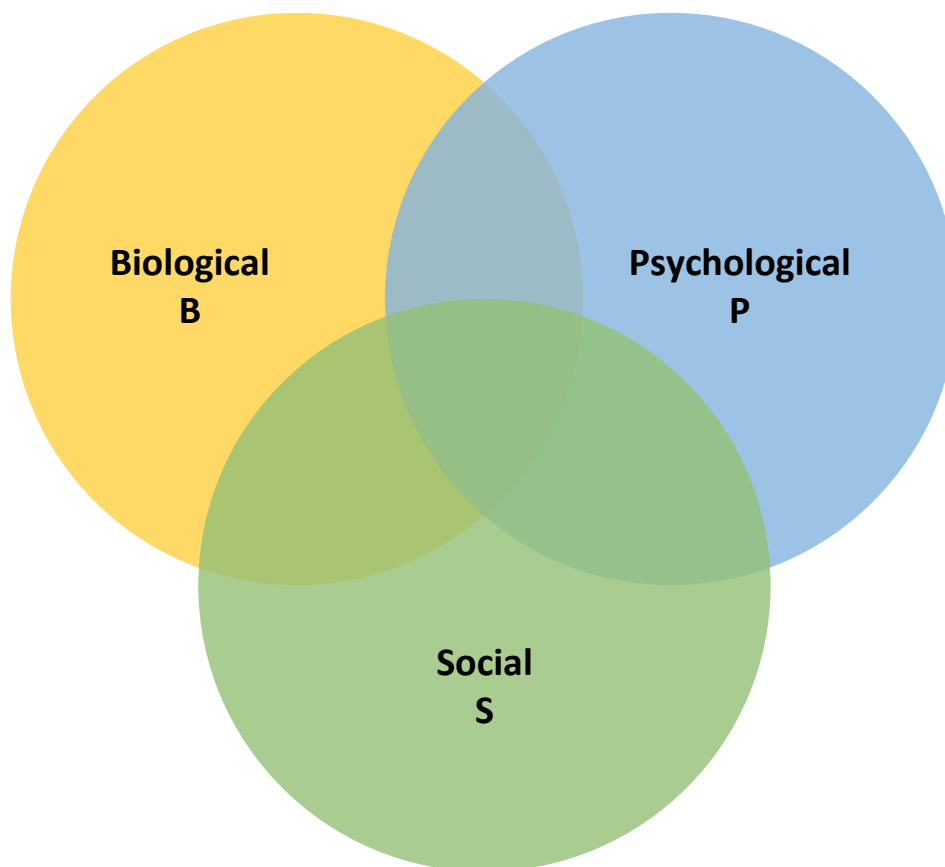
You will see OARS across scripts for biopsychosocial assessment, teach-back and goal-setting. **Table 3** below provides descriptions, purposes and examples of OARS.

^[18] These terms are taken from Motivational Interviewing. These fundamental communication skills may be named differently in various communication frameworks and courses.

Table 3: OARS - Descriptions, Purposes and Examples

Skill	Description	Purpose	Examples
O Open questions	<ul style="list-style-type: none"> • Cannot be answered by a simple yes or no, and therefore allows the patient to share more • Communicate/ emphasise that patient's perspective matters 	<ul style="list-style-type: none"> • Get more information • Can be used with close-ended questions to confirm what was said or to focus the session 	<ul style="list-style-type: none"> • How is your (condition) affecting you today? • Tell me about what seem to make it better/ worse • What are you currently doing that helps you manage (condition)?
A Affirmations	<ul style="list-style-type: none"> • A positive statement (praise) about patient strengths (e.g. qualities, behaviours, best efforts or good intentions) • Focus on strong, not wrong! Validate and affirm what is strong to support momentum towards change rather than on what is wrong with outcomes or patient behaviours • Part of positive performance feedback 	<ul style="list-style-type: none"> • Build confidence, even when pre-determined goals are not met (e.g. praising effort) • Reinforce healthy decisions and behaviours 	<ul style="list-style-type: none"> • It seems like when you put your mind to it, you can really get things moving (in response to patient sharing a previous success story) • You recognise that.. and have come up with some really good ideas about ...
R Reflections <i>* Reflects thoughts, feelings, behaviours</i>	<ul style="list-style-type: none"> • Simple (Repeat/ slight rephrase) • Complex (Makes a guess about the meaning that has not been directly stated, e.g., metaphor, continuing the paragraph) 	<ul style="list-style-type: none"> • Build rapport • Allow patient to "hear" his or her own words, feelings and behaviours 	<ul style="list-style-type: none"> • You are trying your best to provide for your family. • (Patient complaining about high blood sugar while giving up chocolate) You are wondering what's the point of giving up what you love to eat when it doesn't seem to make a difference at all... and if there is something you missed.
S Summaries	Put together most important points from the conversation	Help to <ul style="list-style-type: none"> • Check for accuracy in your understanding/ help patient see the bigger picture • Transit to a new topic/ part, • E.g. move to action plan 	<ul style="list-style-type: none"> • You have shared a lot here and I want to make sure that I got everything/ understood what you said accurately... (summarise and transit)... this is related to (next topic)... is it okay if we talk about that as well?

Biopsychosocial Assessment



The biopsychosocial (BPS) assessment, when applied through team-based care and via dyadic relationships (e.g. between a doctor, nurse, allied health professional and the patient), enhances the potential for improved clinical outcomes. These conversations between care team members and patient increase their awareness of interactions among the biological, psychological, sociocultural and spiritual factors and improve their understanding of the patient's presenting issues. The patient's increased awareness enables them to make sense of the rationale for self-management of their chronic condition. The BPS assessment in conversation strengthens the patient's experience of living with the chronic condition.

To elicit BPS factors of presenting issues, asking BPS questions (e.g. open-ended questions to elicit B, P and S aspects about symptoms of the chronic illness and reflections to ensure accurate understanding by patient) enables care team members to understand and explain to the patient how his or her presenting concern had come about. It also provides insight to the patient's social determinants of health.

Table 4 presents the BPS competencies at master stage, to illustrate what a seasoned PCC practitioner might be observed doing during a consultation. **Table 5** provides examples on questions or phrases we can use. As a general guide, the dialogue between care team member and patient begins with the care team member sharing a self-introduction, using lay language for a new patient and assessing/ matching the patient's language used. The language applied for the BPS assessment is intentionally matched with the patient's choice and level of language to maximise the patient's comprehension, engagement and participation in the conversational exchanges.

As the BPS model of assessment mostly starts in the earlier part of a new consultation, the care team member starts with eliciting the patient's issue(s) presented as well as any requests the patient may want addressed. Please note, however, that the BPS assessment can take place on any issue that presents at different parts throughout a consultation.

Table 4: Biopsychosocial (BPS) Competencies at Master Stage

No	BPS Competencies (Master Stage)	
C1	Talk about and assess Bio-Psychosocial (BPS) factors, including cultural contexts, in ways that engage, facilitate, and activate the person with health condition	<ul style="list-style-type: none"> • Used patient's own words, matched patient's language use • Focused on patient's presenting issue • Identified patient's presenting issue accurately and concisely • Assessed BPS factors tied back to patient's presenting issue and care team's agenda • Identified values and tied back to the patient's presenting issue and care team's agenda • Put together what the patient said about patient's presenting issue concisely and tied to care team's agenda
C2	Identify and reinforce patient/client's strengths and capabilities to increase self-efficacy in self-management	<ul style="list-style-type: none"> • Identified strengths, e.g. "What have you been doing to cope better/ manage XXX?" • Identified past successes in behaviour change when needed, e.g. "Think about the last time you had a challenge with (a health area), what worked well to improve it?" • Affirmed patient using positive performance feedback, e.g. "<i>You have been resourceful, seeking relevant information online and from other patients. This has helped build your self-care toolbox so that you can pick what is most helpful at any time. That's very good!</i>" • Linked patient's strengths and past successes/concrete behaviours to patient's presenting issue and care team's agenda
C3	Use strategies to work with patient/client's ambivalence and support them working towards what they value Note: <i>Ambivalence, e.g. conflict in beliefs, values and context/environment</i>	<ul style="list-style-type: none"> • Identified what patient did not believe in or found difficult to do accurately and concisely • Reflected patient's values and ambivalence accurately and concisely • Asked questions to prompt patient to share their views about making health behaviour changes • Tied in patient's views, values, feelings and choice with patient's presenting issue and care team's agenda

Table 5: Biopsychosocial (BPS) Examples (from the Guidelines for Feedback)

No	Item	Examples
C1	Attend to patient (e.g. Warm tone of voice, good eye contact, warm body language) with self-introduction and role in the care team	<ul style="list-style-type: none"> • Hi Mr Tan, I am Jeanne, your pharmacist in the XXX team.
	Begin with lay language , and match patient's language use	
Identify patient's presenting issue		
C1	Ask open-ended questions to elicit patient's key presenting issue	<ul style="list-style-type: none"> • How may I assist you today? • Your doctor referred you to me to XXX. Is there anything else you would like to talk about today?
	If patient has many issues: <ul style="list-style-type: none"> • Ask open-ended questions to target one area that the patient wants to talk about 	<ul style="list-style-type: none"> • I am hearing from you that you are facing issues XX, YY and ZZ. Which is more important/key for us to talk about in this session? • Which key issue could we work on that would enable you to move towards better management of your health condition(s)?
Assess patient's presenting issue and put together what patient says		
C1, C3	Ask biopsychosocial (BPS) questions to understand patient's experience about key presenting issue <ul style="list-style-type: none"> • Bio • Psycho (do, think, feel) • Social 	<ul style="list-style-type: none"> • How often do your blood sugar levels become too high? What could be the reasons? • When your blood sugar levels are out of range, how does that make you feel? • What are some reasons for not coming for regular checkups? • When was the last time you checked your feet for cracks or sores? How was it? Any difficulty? • How do your family and friends respond when you try to make changes to your eating habits? • How do your work life/ family life affect your management of diabetes?
C2	If needed, ask about past successes	<ul style="list-style-type: none"> • Was there a point in the past where you had to make a difficult change and you managed to do it?
	Affirm patient's strengths and encourage patient (e.g. to continue with/ do more of their healthy behaviours) with positive performance feedback where possible	<ul style="list-style-type: none"> • You have been resourceful (positive adjective), seeking relevant information online and from other patients (positive behaviour). This has helped build your self-care toolbox so that you can pick what is most helpful at any time (impact of positive behaviour).

No	Item	Examples
Assess patient's presenting issue and put together what patient says		
C1, C3	<p>Put together what the patient is saying: Reflect and summarise</p> <ul style="list-style-type: none"> Concerns, feelings How BPS factors come together Values, strengths 	<ul style="list-style-type: none"> What I think I am hearing you say is... It sounds like to me you are... I am hearing that you feel your strengths are...
	<p>Ask open-ended questions to elicit patient's _____ of/ regarding the reflections or summaries (e.g. BPS factors that contribute to patient's presenting issue)</p> <ul style="list-style-type: none"> Understanding Thoughts and feelings 	<ul style="list-style-type: none"> Based on what we have discussed so far, how is this different from how you first understood your condition and (the presenting issue)? What do you think and feel about what we have discussed thus far?

Based on the trial training sessions, **learners may need more guidance in these areas:**

- Understanding the patient's key presenting issue and the care team's agenda
 - When the patient's key presenting issue (patient's key presenting issue) is not the same as the care team agenda (care team's agenda), the care team member should assess BPS factors of both. They can ask BPS questions linked to the patient's key presenting issue (e.g., leg swelling) and tie that back to the care team's agenda (e.g., how leg swelling is linked to high blood pressure and the importance of taking the medication as prescribed) to build a common understanding and arrive at next steps mutually.
 - If care team member is unable to attend to the patient's key presenting issue, it is often helpful to reflect the patient's concern to let the patient know that his or her presenting issue was heard and to provide assurance, if appropriate, that it would be followed up separately, e.g. referral to another professional.

- If both patient and care team member are unsure of specific areas to target, or when the patient is unaware of relevant details to share with the care team, “A Day in My Tool” can be helpful. When using the tool, the care team member moves forward, e.g. “What did you do after that?”, and backwards in time, e.g. “Take me back to the morning” to timepoints of interest (e.g., when medication was prescribed to be taken) to explore relevant BPS factors.
- It is useful to highlight to learners that patients do not always provide answers as expected, e.g., the patient may provide psychological or social information when a biological question was asked. Learners should expect the assessment process to be dynamic, with the need to make and verify hypotheses that explain what contribute to, trigger, or maintain the key presenting issue as the conversation unfolds.

Teach-back

Providing detailed information on what is clinically needful is the natural forte of care team members. It is common for care team members to provide step-by-step information, for instance, on how to administer a medication such as insulin injections for those living with Type 1 diabetes or to complete a series of movements to improve the patient's strength or flexibility. While patient education is a key component of diabetes care, this might not be done optimally.

Teach-back is a method to confirm patient's understanding in a non-shaming, non-judgmental way. Patients are asked to explain in their own words what they need to know or do. Teach-back is not a test of patients' knowledge but a test of how well we explain something. It is an evidence-based approach to improving patient-provider communication and patient health outcomes^[19]. Teach-back can also be used to check that the patient understood biopsychosocial factors that got in the way of their effective self-management. Teach-back has the following **important elements**:

1. Focus on the most important messages
2. Use lay language
3. Ask in a non-shaming way
 - "I want to be sure that I have explained everything clearly. Can you explain it back to me so I can be sure I was clear?"
 - "What will you tell your XXX (e.g. husband, friend) about the changes we made to your medicines today?"
4. Rephrase your explanation and check understanding if the patient does not understand

^[19] Schillinger, D., Piette, J., Grumbach, K., et al. (2003). Closing the loop: physician communication with diabetic persons who have low health literacy. *Arch Intern Med.* 163, 83–90.

Table 6 presents teach-back competencies at the master stage, to illustrate what a seasoned PCC practitioner might be observed doing during a consultation. **Table 7** provides examples of questions or phrases we can use.

Table 6: Teach-back Competencies at Master Stage

No	Teach-back competencies (Master stage)	
C4	<ul style="list-style-type: none"> Identify learning priorities and needs of patients/ clients <p>Note:</p> <ul style="list-style-type: none"> <i>Priorities = what patient wants to learn</i> <i>Needs = what patient doesn't know within what patient wants to learn</i> 	<ul style="list-style-type: none"> Established an area of focus for the session for information-giving with patient collaboratively while balancing care team's agenda
		<ul style="list-style-type: none"> Identified patient's learning priorities and needs Asked permission to provide information or share more Addressed patient's learning needs by building on patient's specific information gaps while using patient's own words for areas that the patient understood Drew linkages between the patient's learning needs with care team member's agenda
C5	Provide information in manageable chunks and use lay language to increase patient/ client's health literacy through conversations	<ul style="list-style-type: none"> Provided manageable chunks of information
		<ul style="list-style-type: none"> Used lay language, with no jargon used, when explaining complex health concepts or mechanisms
		<ul style="list-style-type: none"> Used and included patient's words all the time Made reference to examples that patient had shared to facilitate understanding of new ideas
C6	Use strategies to check the patient/ client-provider communication and patient/ client understanding in a non-judgmental way	<ul style="list-style-type: none"> Used non-shaming language to check patient's understanding of information provided (e.g. "Just so I know that I am clear when explaining to you...")
		<ul style="list-style-type: none"> If patient did not understand fully what was shared: <ul style="list-style-type: none"> Checked understanding of what patient communicated Identified specific information gaps and built on gaps, using patient's own words for areas that the patient understood Paraphrased information before checking patient's understanding again

Table 7: Teach-back Examples (from the Guidelines for Feedback)

No	Item	Examples
C4	Ask open-ended questions to establish an area of focus (what the patient wants to receive information/ set a goal on) in the session with the patient collaboratively	<ul style="list-style-type: none"> Based on what we discussed, what are you most concerned/ worried about today?
	Asks open-ended questions to elicit what patient currently knows about the area	<ul style="list-style-type: none"> Just so I don't repeat what you already know, can you tell me a little about what you know about XXX?
	Ask permission to provide information or share more	<ul style="list-style-type: none"> Is it okay with you if I tell you what we know about... If you like, I can tell you about some things that other people have tried successfully. Would that be okay? Do you mind if I share my concerns? If you're interested, I have a/some recommendation(s) for you. Would you like to hear it/them?
C5	Use lay language when providing information	
	Provided information in manageable chunks	
C6	Ask open-ended questions to elicit patient's (i) understanding or (ii) thoughts and feelings of/ regarding the the information provided (teach back):	
	<ul style="list-style-type: none"> Understanding (in non-shaming way language) Thoughts and feelings about information/ advice shared 	<ul style="list-style-type: none"> I want to be sure I explained everything clearly. Can you explain it back to me so I can be sure I was clear? How would you share what you have learned with a friend or family member? What do you think/ feel about (the information)? I am interested in hearing your thoughts about this idea...
	Check for further questions and ask permission before transiting to another area in the conversation	<ul style="list-style-type: none"> Do you have any further questions you would like to clarify before we move on?

Based on the trial training sessions, **learners may need more guidance in these areas:**

- PCC learners sometimes ask permission to provide information to redirect the conversation to the care team agenda without addressing the patient's presenting issue. Patients often say "ok" when care team members ask, "May I share...?" out of courtesy and respect for the clinician, instead of an inherent interest in the information. **To avoid this, it is crucial to check that you have identified the patient's presenting issue accurately as early as possible in the consultation, and to be sensitive to the concerns that may emerge during the consultation.**
- PCC learners sometimes provide more information than what would be considered "a manageable chunk" to a patient. **It would be useful to check in with lay persons on the palatable amount of information and use that as starting reference point with new patients before calibrating to the patient's actual preference for depth of information and information needs.** Please note that there would be patients, regardless of educational status, who would want in-depth information in manageable chunks and lay language.
- PCC learners may provide information that is framed in a way that inadvertently scares patients into compliance. While the information is factual, a fearful patient is likely less able to process information. **Addressing patient's fears compassionately and framing information in a way that offers patients the maximum amount of hope is important to support patient in taking next steps to maintain or improve their health condition.** This is possible even for chronic conditions where there is no current cure.

SMART Goals and Problem-Solving

While there are different variations of SMART, under this framework, SMART is an acronym for Specific, Measurable, Action-oriented, Realistic, and Time-limited.



A. Specific: Clear and well-defined actions to provide sufficient direction for the line of action.



B. Measurable: Measurable actions can include precise frequencies (e.g. brisk-walk for 3 times a week), location/ time (e.g. have a conversation at grandparents' place after dinner), durations (e.g. brisk-walk for 30mins) and/ or amounts (e.g. two servings of vegetables) to help patient monitor their specific actions and visualise success.



C. Action-oriented: An action-oriented goal clearly states the action the patient should be doing.



D. Realistic: Goals should be important to the patient, relevant to their core values to tap on intrinsic motivation and to minimise potential internal conflicts. The patient should also be confident that he or she can complete the goal.



E. Time-limited: Specify a timeline for evaluation. This increases urgency and enables patient to build confidence by rewarding himself or herself when the goal is achieved. Patients could problem-solve around obstacles and adjust their goals, independently or with the support of a care team member, to take the next sustainable step, building success upon success.

Table 8 presents goal-setting competencies at the master stage, to illustrate what a seasoned PCC practitioner might be observed doing during a consultation. **Table 9** provides examples of questions or phrases we can use.

Table 8: Goal-setting Competencies at Master Stage

No	Goal-setting competencies (Master stage)	
C7	Identify patient/ client's priorities and values to set health goals and/or make decisions that are important to them and for improved health outcomes	<ul style="list-style-type: none"> • Health goals or decisions aligned with <ul style="list-style-type: none"> - Patient's priorities and values - Patient's presenting issue
		<ul style="list-style-type: none"> • Set SMART goal and checked that <ul style="list-style-type: none"> - Goal is important to patient - Patient is confident to achieve goal • If patient is not confident: <ul style="list-style-type: none"> - Identified barriers and engaged patient in problem-solving • Affirmed/ encouraged patient

Table 9: Goal-setting and Problem-solving Examples (from the Guidelines for Feedback)

No	Item	Examples
C7	Identify patient's choice about area for target behaviour change	<ul style="list-style-type: none"> • (Summarise what has been talked about and offer some options) So you want to reduce your blood pressure (desired outcome). <ul style="list-style-type: none"> - Have you any thoughts around whether you want to focus on medication, exercise or diet (behaviour to desired health outcome) - Which areas do you want to improve your health on, e.g. diet, medication, exercise? - What is one change you are ready to make to (desired behaviour, e.g. monitor your blood sugar level more regularly)?
	Explore patient's experience of what has worked well for them to change behaviour in the past	<ul style="list-style-type: none"> • Think about the last time you had a challenge with (a health area), what worked well to improve it? Is there something you can learn from there to apply to (current challenge)?
	Explore patient's ideas on steps they want to take for target behaviour change	<ul style="list-style-type: none"> • We are talking about increasing your level of physical activity, do you have any thoughts about how to start/small steps that you can begin to take?
	Use SMART to set goal for behaviour change	
	<ul style="list-style-type: none"> • Specific • Measurable • Action-oriented • Realistic • Time-limited 	<ul style="list-style-type: none"> • You talked about increasing your physical activity level. Which days of the week and how long should we aim for? • Your goal is to have four portions of veg a day. How are we going to record that you managed that? • When you would normally have a 100% sugar level bubble tea (behaviour change), what might you drink instead? • Instead of having chocolate cake at tea time, what might you have instead? • Do you think you can do this? How important is it to you to do this? • When would you start (goal)? • How long do you want to try this for before we review it to see if it is working?
Ask open-ended questions to elicit what will _____ the steps towards achieving goal		
<ul style="list-style-type: none"> • Support or facilitate • Hinder (barriers) 	<ul style="list-style-type: none"> • What's going to help you do what you wanted to do? • What might get in the way of doing what you want to do? 	
Offer practical ways in line with SMART to address patient's barriers to change		

Based on the trial training sessions, **learners may need more guidance in setting action oriented and realistic goals:**



1. Action-oriented

- Avoid setting clinical goals. Clinical goals, such as improving one’s blood pressure or HbA1c, open up many options for action (e.g. through eating habits, exercise, medication compliance) and are not suitable for SMART goals.
- Avoid setting “Don’t” goals. Examples of such goals include “don’t eat desserts”, “watch less TV before bed”, “stop smoking”. Such goals increase the salience of what the patient is not supposed to do, potentially sabotaging efforts to cultivate new habits.
- Target facilitators and barriers. Simply focusing on healthier eating or exercise could be unsuccessful. Care team members can **set goals on the first small steps to facilitating lifestyle changes, e.g. speaking to a family member to help with caregiving so that the patient can have protected time to start physical activity.** Similarly, even when the patient says that he needs time to think about the goal, it is still possible to set a goal around that, e.g. “How are you going to think about it?”



2. Realistic

- Learners may mistakenly believe that patients are confident when patients said “I will try” (to achieve a goal). **Using the importance and confidence rulers** will help determine if the patient would attempt the goal and be successful. The rulers, adapted for local use (“Is this goal important to you?” and “Do you think you can reach this goal?”), are illustrated in the National Diabetes Reference Materials worksheets^[20]. **If the patient gives a score of less than 7 (on a scale of 0 to 10^[21]), identify areas where the patient has reservations** (e.g. “why did you give a score of 5 and not a 6 or 7?”), problem-solve (e.g. “what might bring this up to a 7 or 8?”) and refine the goal. **For patients who struggle to anticipate barriers** (for example they may say “I just need to be more disciplined”), consider asking, “Imagine you are trying to... (describe a scenario in which patient is attempting a goal), what might get in the way?”
- Worksheets are particularly useful for group education sessions where patients reflect and set goals on their own before group sharing, if appropriate. **Using worksheets provides structure to the process and allows the patient to put up visual cues at home** although goals are often set without using worksheets in individual consultations^[22].

^[20] HCPs can download the goal-setting and problem-solving worksheets (“Goals”) for patients in four local languages [here](#). The patient-facing version can be found on Diabetes Hub [here](#).

^[21] **Importance ruler:** Is reaching this goal important to you? Rate from 0 to 10 where 0 is “Not at all important” and 10 is “Very important”; **Confidence ruler:** Do you think you can reach this goal? Rate from 0 to 10 where 0 is “No, I cannot” and 10 is “Yes, I can”.

^[22] See [Annex](#) for a script between trainer and learner from the trial training sessions to illustrate this (under goal-setting module).

Interprofessional Collaboration

Interprofessional collaboration (IPC) consists of working relationships between different care team members, patients, families and communities to promote the best possible health results^[23]. This helps care team members understand the patient's biopsychosocial context and develop holistic interventions, particularly for complex cases. Interprofessional education is an enabler for IPC and person-centred care. It occurs when two or more care team members learn from, with and about each other to improve patient care^[24]. When members of the same care team share similar mindsets and skills, they are able to reinforce each other, and support the patient at each touchpoint. Under the CTE framework for PCC, we focused on **role clarity**.

The roles or scope of duties may overlap across healthcare providers and professions, such as between a diabetic wound nurse and a podiatrist. The amount of role overlap may also vary in different contexts, such as between a hospital or a polyclinic. It is also important to note that the scope of work for each care profession may evolve over time, for instance, trained nurses can now provide venipunctures and give IV drugs, a task previously restricted to doctors. As such, it is important for care team members with overlapping scopes to talk to each other as the standards of service they provide in the areas of overlap should align and be of the same scope and coverage. Care team members should also take time to speak to other members caring for the patient in the institutions that their patients are referred to. Where there is overlapping expertise, the care team member with the warmest relationship with the patient is most suited to support the patient with taking small steps towards healthier life goals.

^[23] The Canadian Interprofessional Health Collaborative (CIHC): A National Interprofessional Competency Framework (February 2010) is accessible [here](#).

^[24] Freeth, D., Hammick, M, Reeves, S, Koppel, I. & Barr, H. (2005). *Effective Interprofessional Education: Development, Delivery and Evaluation*. Blackwell Publishing Ltd.

Aligned with the above, learners from the trial training sessions found peer sharing, which is hearing from other members of the care team on their areas of expertise and challenges, more beneficial than didactic teaching on generic work scopes. Hence, in the reference curriculum, IPC module is recommended when learners include members of different professions. A video was developed for the IPC module, based on a factitious scenario of what could potentially happen due to poor communication between care team members. This video helped participants to recognise, discuss and appreciate the importance of role clarity, psychological safety and interprofessional communications. Good and clear hand-off communications between different healthcare professionals, related to the care of patients whom they co-manage, is an integral component of interprofessional communication. This, towards ensuring optimum quality of care and patient safety.

Acknowledgements

We would like to acknowledge the dedication and commitment of the Care Team Education Workgroup and the learners in the trial training sessions for the development and completion of this playbook.

CTE Workgroup Members

S/N	Name	Designation	Organisation
1	Prof Tai E Shyong [Chair]	Senior Consultant	Division of Endocrinology, National University Hospital
2	Prof Timothy Skinner	Professor of Health Psychology	Institute of Psychology, University of Copenhagen, Denmark
3	Dr Yew Tong Wei	Senior Consultant	Division of Endocrinology, National University Hospital
4	Dr Predeebha d/o PN Kannan	Deputy Director	Primary Care Academy/ Family Medicine Development, National Healthcare Group
5	Dr Chan Keen Loong	Senior Consultant	Department of Psychological Medicine, Khoo Teck Puat Hospital
6	Dr Wong Mei Yin	Senior Consultant Clinical Psychologist; Co-lead (Clinical)	Centre for Effective Living
7	Ms Poh Siew Huay, Winnie (Fu Sihui)	Vice President	Association of Diabetes Educators Singapore
		Advanced Practice Nurse; Nurse Clinician	Nursing, Hougang Polyclinic, National Healthcare Group Polyclinics
8	Dr Guo Xiaoxuan	Consultant	Punggol Polyclinic, SingHealth Polyclinics
9	Ms Zuhaida Binte Amir	Nurse Clinician	Sengkang Polyclinic, SingHealth Polyclinics
10	Ms Ong Li Jiuen	Senior Principal Dietitian/ Head (Dietetics)	Changi General Hospital
11	Dr Tung Yew Cheong	Family Physician, Senior Consultant, Director (Quality and Patient Safety)	National Healthcare Group Polyclinics
12	Ms Tan Wei Wei	Director	Community Health, National University Health System
13	Dr Fadzil Hamzah	Senior Staff Registrar	Department of Sport and Exercise Medicine, Changi General Hospital
14	Dr Choong Shoon Thai	Family Physician; Principal Staff	Jurong Polyclinic, National University Polyclinics
15	Ms Yap Hwee Luan	Nurse Clinician	Pioneer Polyclinic, National University Polyclinics
16	A/Prof Konstadina Griva	Associate Professor	Health Psychology/ Behavioural Medicine Lee Kong Chian School of Medicine, Nanyang Technological University

S/N	Name	Designation	Organisation
17	Dr Helen Bound	Head	Research Centre for Work and Learning, Research and Innovation Division, Institute of Adult Learning, Singapore University of Social Sciences
18	Dr Bi Xiaofang	Senior Researcher	Research Centre for Work and Learning, Research and Innovation Division, Institute of Adult Learning, Singapore University of Social Sciences
19	Ms Julie Seow	Diabetes Type 1 Advocate	Formerly from TOUCH Diabetes Support
20	Mr Satyaprakash Tiwari	Executive Director	Diabetes Singapore
21	Ms Fong Yoke Hiong	Assistant Director	Nursing Tsao Foundation
22	Dr Anne Yeo Kwee Kee	Family Physician	Frontier Healthcare Group
		Adjunct Asst Professor	Yong Loo Lin School of Medicine, National University of Singapore
23	Ms Marine Chioh	Assistant Director	Primary and Community Care Development Division, Agency for Integrated Care
24	Ms Low Kwee Sang, Ivy	Head of Nursing	I-CARE Primary Care Network
25	Ms Quek Ai Huah (Audrey)	Nurse Counsellor	CLASS Primary Care Network
26	Ms See Li Lin	Senior Manager	Health Screening and Management Division, Health Promotion Board
27	Mr Kerk Kim Por	Director	SportCares, Sport Singapore
28	Ms Betty Wong	Acting Deputy Director	Primary and Community Care Division, Ministry of Health

CTE Workgroup Secretariat guided by Co-chairs of CTE WG, and Dr Ruth Lim (Director of Primary and Community Care Division, MOH)

S/N	Name	Designation	Organisation
1	Dr Ho Anqi	Assistant Director	Ministry of Health
2	Ms Betty Wong	Acting Deputy Director	Ministry of Health
3	Ms Chen Yufei	Senior Manager	Ministry of Health
4	Dr Sarah Yong	Senior Resident	Ministry of Health
5	Mr Andre Ang	Intern	SUTD-SMU
6	Mr Nicholas PH Chua	Intern	Temasek Polytechnic
7	Ms Belle Eng Xin Lin	Intern	National University of Singapore
8	Mr Joel Lim Yee Cheong	Intern	National University of Singapore
9	Mr Ryan Lim Teck Qin	Intern	National University of Singapore
10	Ms Lin Qian	Intern	Columbia University
11	Ms Ng Kok Yin	Intern	Singapore Management University
12	Ms Janice Ow-Yong Yun Fei	Intern	Temasek Polytechnic
13	Mr Sukant Pachbhaiya	Intern	Temasek Polytechnic
14	Ms Cloe NS Seng	Intern	Temasek Polytechnic
15	Mr Miguel Joshua Tan Kai-Chen	Intern	National University of Singapore
16	Ms Teh Xin Yee	Intern	Temasek Polytechnic
17	Ms Grace Wong Wei Ting	Intern	National University of Singapore

2019 National University Health System (NUHS) Trial Training Session

S/N	Name	Designation	Organisation
1	Rose Wong	Nurse	Community Nursing, NUHS
2	Ms Shariffa Beevi	Nurse	Community Nursing, NUHS
3	Ms Rafidah Rosman	Nurse	Community Nursing, NUHS
4	Ms Elaine Lee	Assistant Care Coordinator	Community Nursing, NUHS
5	Ms Low Shi Yun	Care Coordinator	Community Nursing, NUHS
6	Ms Tan Kim Fong	Senior Dietitian	Department of Dietetics, National University Hospital
7	Dr Amanda Lim	Consultant	Department of Dietetics, National University Hospital
8	Ms Teoh Chieu Leng	Assistant Nurse Clinician	National University Hospital
9	Ms Nur Athirah Bte Azman	Coordinator	Patient Activation through Community Empowerment/Engagement for Diabetes (PACE-D) programme
10	Ms Nadzirah Bte Isa	Coordinator	Patient Activation through Community Empowerment/Engagement for Diabetes (PACE-D) programme
11	Ms Sally Lee	Coordinator	Patient Activation through Community Empowerment/Engagement for Diabetes (PACE-D) programme
12	Ms Lee Zheng Fen	Coordinator	Patient Activation through Community Empowerment/Engagement for Diabetes (PACE-D) programme
13	Ms Chiew Wenqi	Health Peer	NUHS Health Peers
14	Mr Sunny Cheok	Health Peer	NUHS Health Peers
15	Ms Sin Wei Lin Regina	Social worker/ Cluster Support@ Clementi/ Bukit Timah	Lion Befrienders
16	Mr Chew Kim Seng	Social worker/ Cluster Support@ Clementi/ Bukit Timah	Lion Befrienders

2020 Trial Training Session

S/N	Name	Designation	Organisation
1	Mr Tristan Gwee	Senior Social Worker	Presbyterian Community Services
2	Mr Ian Russell Anthony	Research Assistant	Year of Care Programme, National University Hospital
3	Mr Ivan Ho	Programme Executive	REACH Community Services
4	Ms Chin Yen Tin	Programme Executive, Conduct SAC Programme	REACH Community Services
5	Ms Serena Tan	Programme Executive, Community Befriending; Programme Coordinator	REACH Community Services
6	Mr Lu Kee Hong	Health Ambassador	Health Promotion Board
7	Ms Lim Shu Fang	Principal Pharmacist	Division of Pharmacy, Tan Tock Seng Hospital
8	Mr Muhammad Jazimin Bin Haron	Senior Physiotherapist	Rehabilitation Services, Yishun Health
9	Ms Noorani Bte Othman	Nurse Clinician	Department of Endocrinology, Tan Tock Seng Hospital
10	Mr Satyaprakash Tiwari	Executive Director	Diabetes Singapore
11	Ms Karishma J Surtani	Senior Dietitian	Yishun Health
12	Ms Zhang Xiaoping, Carol	Diabetes Educator	SGH Diabetes and Metabolism Centre
13	Ms Tan Kim Fong	Senior Dietitian	Department of Dietetics, National University Hospital

**2021 Training Session with Pharmacists from the PERSUASION
(Person-Centred Drug Related Problem Resolution) Programme^[25]**

S/N	Name	Designation	Organisation
1	Dr Fu Wing Hang	Principal Clinical Pharmacist	Department of Pharmacy, Sengkang General Hospital
2	Dr Ong Wan Chee	Principal Clinical Pharmacist	Department of Pharmacy, Singapore General Hospital
3	Ms Geraldine Leong Si Wai	Pharmacist	Department of Pharmacy, SingHealth Polyclinics
4	Ms Lydia Goh Li Lin	Pharmacist	Department of Pharmacy, SingHealth Polyclinics
5	Ms Elaine Lim Bee Tin	Senior Pharmacist	Department of Pharmacy, Tan Tock Seng Hospital
6	Ms Tasmin Teo Ler Min	Senior Pharmacist	Department of Pharmacy, Khoo Teck Puat Hospital
7	Ms Joan Chua Hui Ting	Senior Pharmacist	Department of Pharmacy, Woodlands Health
8	Mr Norman Koay Jia Jun	Senior Pharmacist	Department of Pharmacy, Institute of Mental Health
9	Ms Yap Hui Rei	Senior Pharmacist (Clinical)	Department of Pharmacy, National Healthcare Group Pharmacy
10	Ms Hilda Ng Sock Mui	Senior Pharmacist	Department of Pharmacy, National University Polyclinics
11	Ms Deborah Chia	Senior Clinical Pharmacist	Department of Pharmacy, National University Hospital
12	Ms Joey Chien Kheng Yee	Senior Pharmacist	Department of Pharmacy (Outpatient), Ng Teng Fong General Hospital
13	Mr Woo Jia Xiang	Senior Clinical Pharmacist	Department of Pharmacy, National University Hospital Pharmacy, National University Polyclinics

^[25] PERSUASION is a nationwide multidisciplinary initiative that adds health coaching as an intervention for pharmacist clinicians to empower clients and their caregivers, focusing on what matters to them. The programme covers a wide range of conditions, including heart, diabetes, high blood pressure, psychiatric conditions, and kidney impairment.

2021 Biopsychosocial Training Session with Primary Care Network (PCN) and Community Nurses

S/N	Name	Designation	Organisation
1	Ms Manisha Dev D/O Badum Dev	Staff Nurse I	Central-North PCN
2	Ms Wong Pei Yi	Staff Nurse	Central-North PCN
3	Ms Faith Caroline Sim Puay Kheng	Nurse counsellor	Class PCN
4	Ms Quek Ai Huah, Audrey	Nurse counsellor	Class PCN
5	Ms Chan Choi Ngoh Penny	Senior Staff Nurse	Frontier PCN
6	Ms Chua Wei Ting, Valerie	Senior Staff Nurse	Frontier PCN
7	Ms Serene Ang Hui Xuan	Senior Staff Nurse	Frontier PCN
8	Ms Susie Wong Ling Yii	Senior Staff Nurse	Frontier PCN
9	Ms Tan Hwee Boon Christyn	Senior Staff Nurse	Frontier PCN
10	Ms Lee May May Crystal	Assistant Nurse Clinician	I-Care PCN
11	Ms R Srimitha	Senior Staff Nurse	I-Care PCN
12	Ms Shirlee Esther Ong Sir Yee	Senior Staff Nurse	I-Care PCN
13	Ms Huo Junchi	Senior Staff Nurse II (Community Nurse)	National University Health System PCN
14	Ms Rafidah Binte Rosman	Senior Staff Nurse II (Community Nurse)	National University Health System PCN
15	Ms Alice Yung Fong Lyne	Staff Nurse I	Parkway Shenton PCN
16	Ms Beatrice Neo Sau En	Staff Nurse I	Parkway Shenton PCN
17	Ms Chan Li Xuan	Staff Nurse I	Parkway Shenton PCN
18	Ms Jacqueline See Hui Yin	Assistant Nurse Clinician	Raffles Medical PCN
19	Ms Rokiah Binte Mahmood	Snr Enrolled Nurse	Raffles Medical PCN
20	Ms Sharon Yeo Jia Yi	Senior primary care coordinator	SingHealth DOT PCN
21	Ms Teo Rui Ying	Senior Staff Nurse 1	SingHealth DOT PCN
22	Ms Tan Quee Eng	Nurse clinician	SingHealth Regional PCN
23	Ms Haslinda Binti Abdullah	Nurse Counsellor	UNITED PCN
24	Ms Ong Siew Kwan	Nurse Counsellor	UNITED PCN
25	Mr Puey Chun Seng	Senior Centre Manager	SATA Community Health Centre

S/N	Name	Designation	Organisation
26	Ms See Li Lin	Senior Manager	Regional Health System & Community Engagement, Preventive Health Programme Division, Health Promotion Board
27	Mr Kerk Kim Por	Director	SportCares, Sport Singapore
28	Ms Betty Wong	Acting Deputy Director	Primary and Community Care Division, Ministry of Health
29	Ms Cindy Poh Xin Yi	Senior Staff Nurse	Tampines Community Health Centre
30	Ms Chua Siew Kee Jennie	Diabetes Nurse Educator	Diabetes Singapore
31	Ms Daljit Kaur	Diabetes Nurse Educator	Diabetes Singapore
32	Ms Tan Rose	Diabetes Nurse Educator	Diabetes Singapore
33	Ms Cui Xue	Senior Staff Nurse (Community Nurse)	Singapore General Hospital
34	Ms Fion Jing Wen Histed	Senior Staff Nurse (Community Nurse)	Singapore General Hospital
35	Ms Irene Tan Cheng Gaik	Nurse Clinician (Community Nurse)	Singapore General Hospital
36	Ms Nur Fadillah Binte Ahmad	Senior Staff Nurse (Community Nurse)	Singapore General Hospital

Annex

Annex	Description	Material
A	Reference Curriculum	Link
B	Rubric and Guidelines for Feedback	Link
C	Instructions and Templates for CTE Training Slide Materials (optional for trainers)	Link

Curriculum Videos and Script

No	Title	Description	Video Link	Script (Word doc)
A Scenarios - Mentalising				
1	No insulin	Shows the patients and doctors' thought process behind their words	No Insulin Mentalising	No insulin Script
2	Keen on alternative solutions	Shows the patients and doctors' thought process behind their words	Keen on alternative solutions? Mentalising	Keen on alternative solutions Script

B Scenarios – Less & more ideal				
1	Angry skeptical patient	Shows the less & more ideal way in communicating with patients who may be angry and skeptical	Angry skeptical patient	Angry skeptical patient Script
2	Dr Google	Shows the less & more ideal way of communicating with patients that uses the internet to seek medical advice	Dr Google	Dr Google Script
3	Honestly non-adherent	Shows the more & less ideal way of talking to patients who do not adhere to medical advice	Honestly non-adherent	Honestly non-adherent Script
4	Keen on alternative solutions	Shows the less & more ideal way of communicating with patients who are interested in trying out alternative medicine such as traditional & complementary medicine	Keen on alternative solutions - Less & more ideal	Keen on alternative solutions - Less & more ideal Script
5	No insulin	Shows the less & more ideal way of communicating with patients that are hesitant to go on insulin	No Insulin - Less & more ideal	No Insulin - Less & more ideal Script
6	Goal-setting	Shows the less & more ideal way of setting goals with patients	Goal Setting	Goal Setting Script

No	Title	Description	Video Link	Script (Word doc)
C	Others			
1	A day in a life tool		A day in a life	A day in a life Script
2	Biopsychosocial lecture video		BPS Mindset (Lecture video)	BPS Mindset (Lecture video) Script
3	Interprofessional Collaboration lecture video		IPC	IPC Script
4	Communication Pre-session		Communication Pre-session	
5	The Biopsychosocial Mindset		The Biopsychosocial Mindset	
6	Video to access NDRM	This video shows users how to access National Diabetes Reference Materials (NDRM) on HealthHub	Access NDRM video	