

Matching Patients With Technology Using the ICC Framework

CONTRIBUTING AUTHORS: Ashley Sneed, NP, The Ohio State University; Esther Thatcher, PhD, RN, Case Western Reserve University; Sonal Patil, MD, MSPH, Case Western Reserve University; Patricia Ryan, MD, The Ohio State University; Marilee Clemmons, PharmD, BCACP, University of Toledo, on behalf of Team Best Practices

Digital tools can improve cardiometabolic care by supporting follow-up, treatment adherence, and patient engagement. The Identify, Configure, Collaborate (ICC) Framework helps care teams thoughtfully integrate technology into patient care by assessing readiness, aligning tools with appropriate support, and collaborating on patient health priorities.¹ Below is a step-by-step guide for clinical teams to use in patient encounters.

Figure 1. Identify, Configure, Collaborate (ICC) Framework and Guiding Questions

1. Identify – Assess the patient’s readiness, ability, and access to technology by asking:

- Do you have regular access to a smartphone, computer, and reliable internet?
- What type of device do you use (e.g., phone model or operating system)?
- Are you comfortable using apps or programs (e.g., Zoom) on your device?²
- Are you able to set up or troubleshoot basic technology on your own?²
- Do you have any physical limitations (e.g., vision, hearing, or hand dexterity) that could affect device use?
- Have you been told you have memory or thinking challenges that might make technology harder to use?



2. Configure – Match tools to patient preferences and support needs by asking:

- How do you prefer to learn new information (seeing, hearing, reading, or doing)?
- Do you need help reading or understanding health information?
- Is there someone who can help you with technology if needed?
- What treatment goals are we targeting?



Also, set clear expectations and plan for follow-up by:

- Reviewing set-up requirements, including any necessary approvals and expected timelines
- Discussing potential limitations (e.g., connectivity issues, battery life, Bluetooth syncing)
- Determining when and how the care team should be alerted through device monitoring or data sharing
- Clarifying what issues should prompt the patient to contact the care team if something is not working as expected
- Establishing a clear follow-up schedule to review data, troubleshoot issues, and adjust the plan as needed

3. Collaborate – Foster shared decision making and sustained engagement by asking:

- Which health goals matter most to you right now?
- Are you comfortable sharing health data (e.g., blood pressure or glucose) electronically?
- How can we best support you if your plan needs to change?



Patient Scenarios: Demonstrating Digital Readiness

Clinicians should assess each patient’s comfort level and technological capabilities before incorporating digital tools into their treatment plan.

- **Low:** A patient who is uncomfortable with apps uses a paper log, receives brief in-clinic teaching, and has weekly nurse follow-up calls to stay on track.
- **Moderate:** A patient who uses apps independently but occasionally forgets medication doses receives app-based reminders with customized alerts and a plan to review shared blood pressure and glucose data at each follow-up visit.
- **High:** A patient with a smartphone and preference for visual data uses an app-enabled blood pressure cuff with color-coded trends and automated weekly summaries sent directly to the clinic.

For more information, access Cardi-OH’s resources on [technology as support](#) and [technology and medication adherence](#).

References

1. Greenwood DA, Howell F, Scher L, et al. A framework for optimizing technology-enabled diabetes and cardiometabolic care and education: the role of the diabetes care and education specialist. *Diabetes Educ.* 2020;46(4):315-322. doi:10.1177/0145721720935125.
2. Nelson LA, Pennings JS, Sommer EC, et al. A 3-item measure of digital health care literacy: development and validation study. *JMIR Form Res.* 2022;6(4):e36043. doi:10.2196/36043.

The Ohio Cardiovascular and Diabetes Health Collaborative is funded by the Ohio Department of Medicaid and administered by the Ohio Colleges of Medicine Government Resource Center. The views expressed in this document are solely those of the authors and do not represent the views of the state of Ohio or federal Medicaid programs.

For more information head to [Cardi-OH.org](https://www.ohio.gov/health/cardi-oh).