

The roles of audiologists and speech-language pathologists in primary care teams

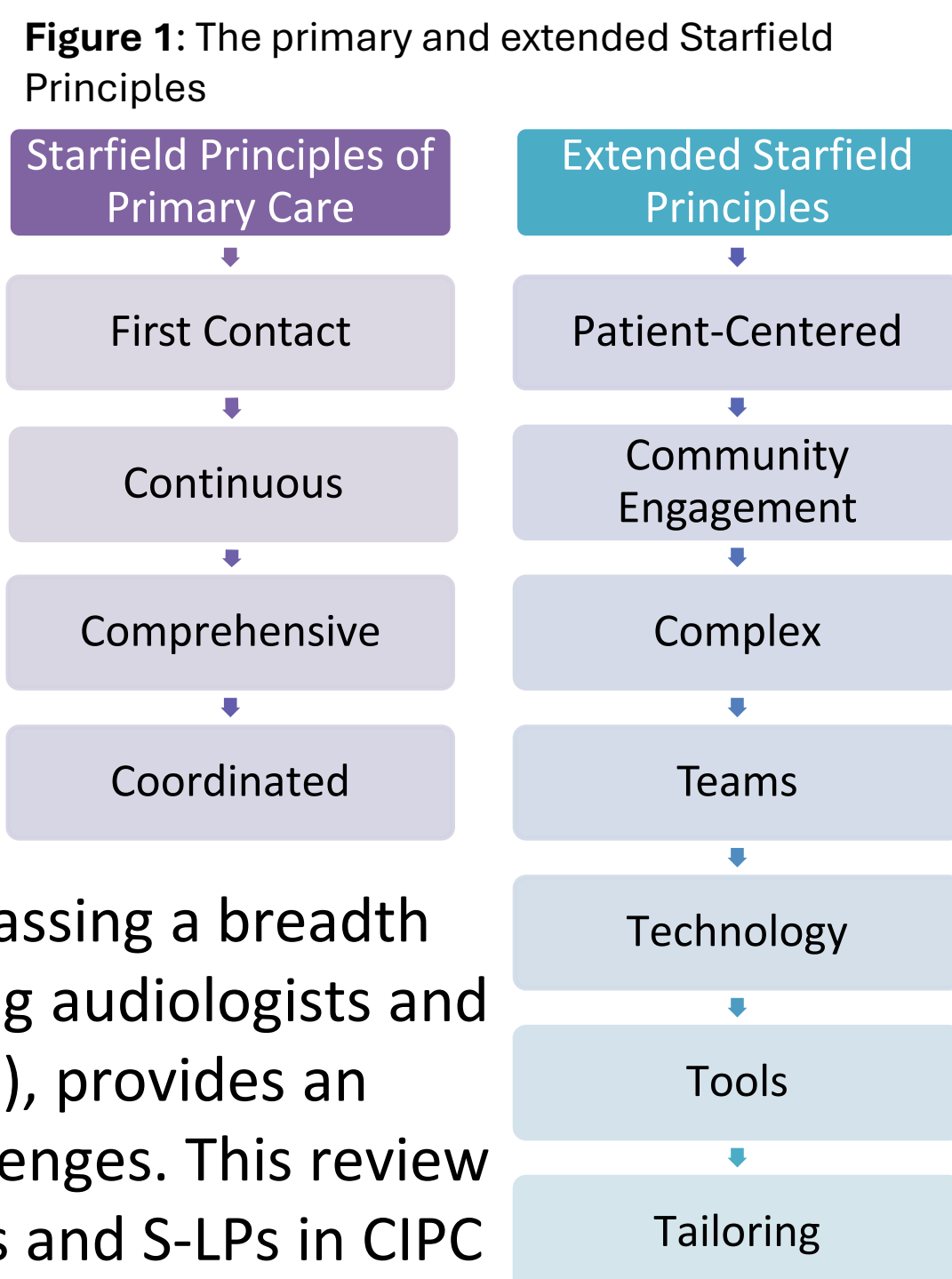
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PRIMARY CARE IN CANADA

Canada's primary care system is evolving to manage the rising need for comprehensive patient care¹, including those with complex communication disorders². This ongoing transformation is reflected in the expanding Starfield principles of primary care^{3,4}, designed to cater to both patient and system-wide needs (Figure 1). Comprehensive Interprofessional

Primary Care(CIPC) teams, encompassing a breadth of healthcare professionals, including audiologists and speech-language pathologists (S-LPs), provides an opportunity to attend to these challenges. This review investigates the roles of audiologists and S-LPs in CIPC teams to inform the integration of these professions into Canadian primary care contexts.



PROJECT AIMS

A preliminary search of MEDLINE, the Cochrane Database of Systematic Reviews, and Joana Briggs Institute (JBI) Evidence Synthesis revealed that there are no current or ongoing systematic or scoping reviews on the role of audiologists and S-LPs in integrated primary care teams. Instead, relevant reviews focused on the potential roles of audiologists and S-LPs in dealing with specific conditions across various team settings. As a result, our primary objectives of this review were to:

1. Comprehend the roles of audiologists & S-LPs within CIPC teams
2. Detail the conditions and outcomes of the roles of audiologists and S-LPs within CIPC teams
3. Understand how CIPC teams with audiologists and/or S-LPs

METHODS

A scoping review was conducted in alignment with the JBI Scoping Review Protocol⁵. Articles were retrieved on May 31, 2023, using Ovid, Medline, EBSCO, Scopus, Web of Science, and the Cochrane Central Register of Controlled Trials, without any restrictions on the date. Articles were uploaded to Covidence, where duplicates were removed. The scoping review included four stages:

Eligibility Criteria

- a) Peer-reviewed
- b) Available in English
- c) Contains primary sources of data
- d) Electronically accessible
- e) Involves an audiologist and/or S-LP on the team
- f) Has a primary care provider
- g) A minimum of 3 healthcare providers on the team
- h) Adhered to the Starfield Principles of Primary Care
- i) Included current or future healthcare delivery contexts

Figure 2: Scoping Review Eligibility Criteria

The process of study inclusion is illustrated using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for scoping review (PRISMA-ScR) flow diagram (Figure 3).

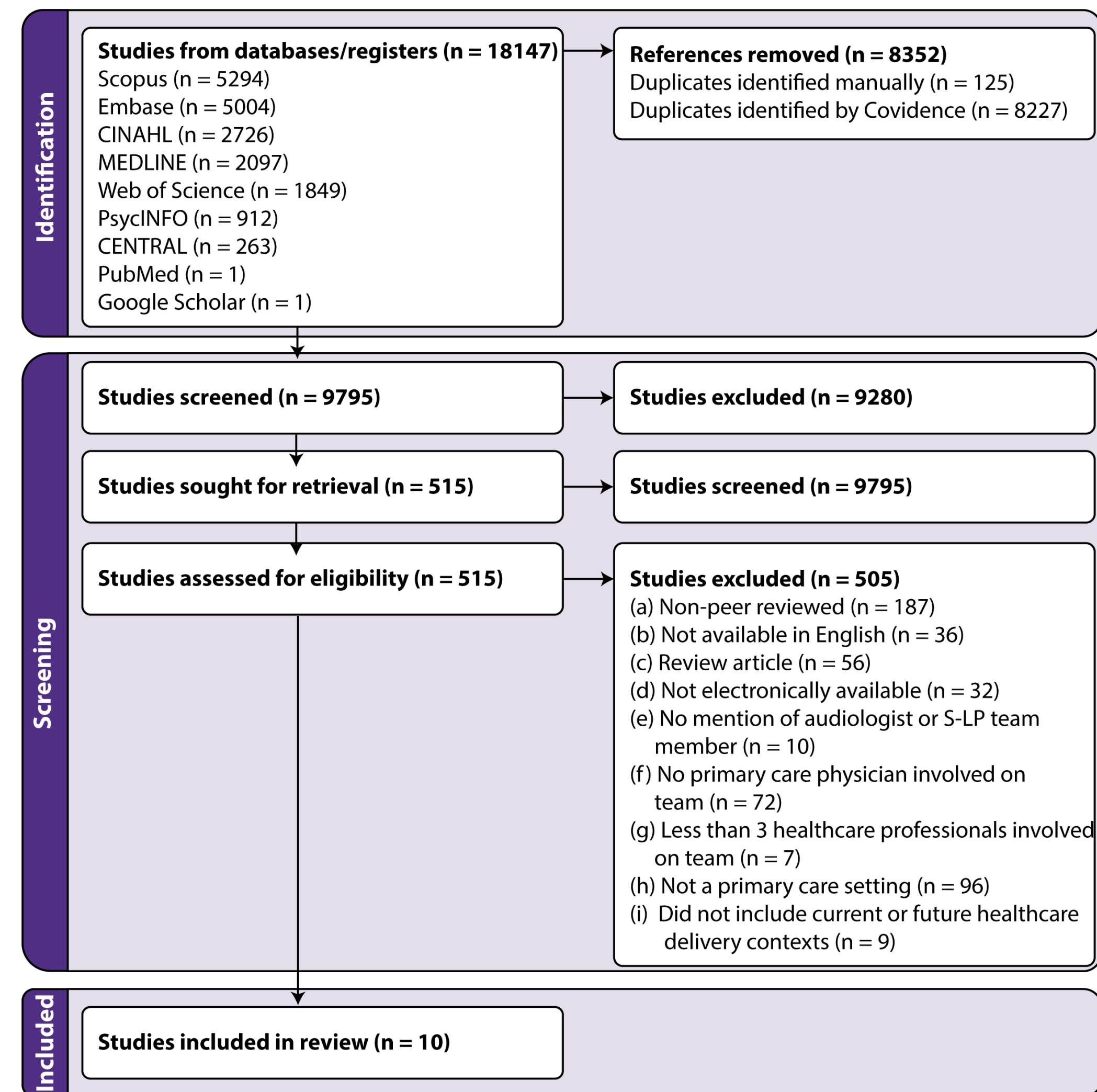


Figure 3: PRISMA-ScR

REPORTED STUDY OUTCOMES

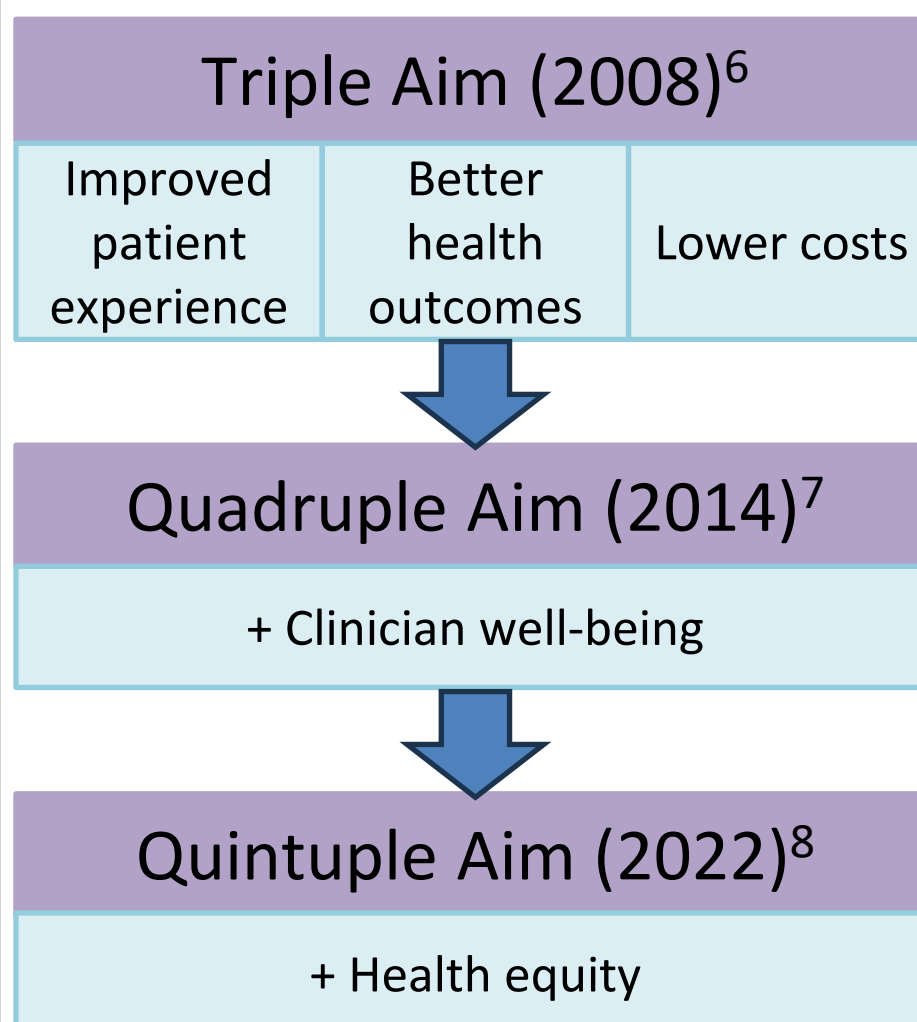


Figure 4: Evolution of the Quintuple Aim

This review revealed better patient experiences, health outcomes, and health equity among CIPC teams with an audiologist and/or S-LP (Figure 3). This underscores the ways integration of audiologists and S-LPs into Canadian primary healthcare teams can enhance primary care, particularly for those with communication and swallowing difficulties.

In contrast, clinician well-being was the least mentioned aim, likely due to the timing of the publications (Figure 4).

Only two articles were written after the release of the quadruple aims, which emphasizes clinician well-being⁷. This recent focus on clinician well-being in research stems from concerns over rising burnout and attrition rates in primary care⁹.

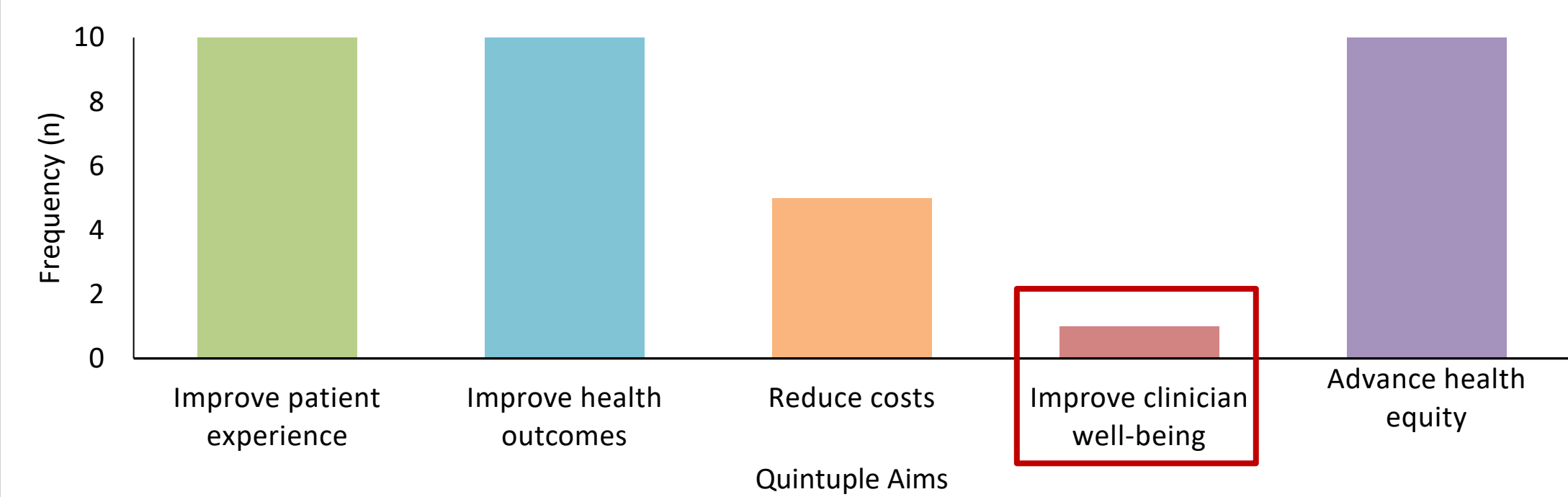


Figure 5: Categorization of Reported Study Outcomes According to the Quintuple Aim.

PROFESSIONAL & TEAM ROLES

The roles of audiologists and S-LPs were comprised of various roles that requires teams to intricately balance each team members roles to enhance care through collaborative efforts through role clarification and negotiation (Figure 6).

Professional Roles: Audiologists and S-LPs played four key roles in care: *patient screening, assessment, intervention planning, and education/counseling*. In addition to these, they assist in health promotion strategies and train team members on communication disorders and strategies.

Team Roles:

S-LP Team Role: consisted of educating and training other team members, coordinating team activities for effective patient care, negotiating their roles in the team, promoting overall patient health through prevention strategies, and participating in system organization for optimal team performance.

Audiologist Team Role: consisted of educational responsibilities and team member training, community and professional consultation, and program management and establishment.

Overlapping Roles: Different healthcare professionals across the teams were found to have overlapping roles with audiologists and S-LPs. The rehabilitation physician assessed swallowing and therapy, the nurse conducted hearing and early communication screenings, the physician assessed dysphagia, the occupational therapist evaluated cognition, the S-LP oversaw hearing aid interventions, and the pulmonologist managed tracheostomy-related interventions.

Service delegation: a method aimed at improving access to care by leveraging overlapping roles¹⁰. It emphasizes *role clarification*, which entails understanding your role and your team members' roles, and *role negotiation*, a collaborative decision-making process that benefits both the team and the patient¹⁰.

DELIVERY OF CARE & INFORMATION SHARING

Despite all articles being published prior to the COVID-19 pandemic, nearly half of the articles discussed alternative or hybrid models for delivering care (Figure 6). This underscores two key points: (1) within a CIPC team, patients should have the flexibility to receive care in various forms that best suit them; and (2) the use of technology enables clinicians to provide care remotely, eliminating the need for co-location. This opens significant opportunities for delivering care to patients in remote and rural areas, and for teams to engage providers who cannot physically be on-site.

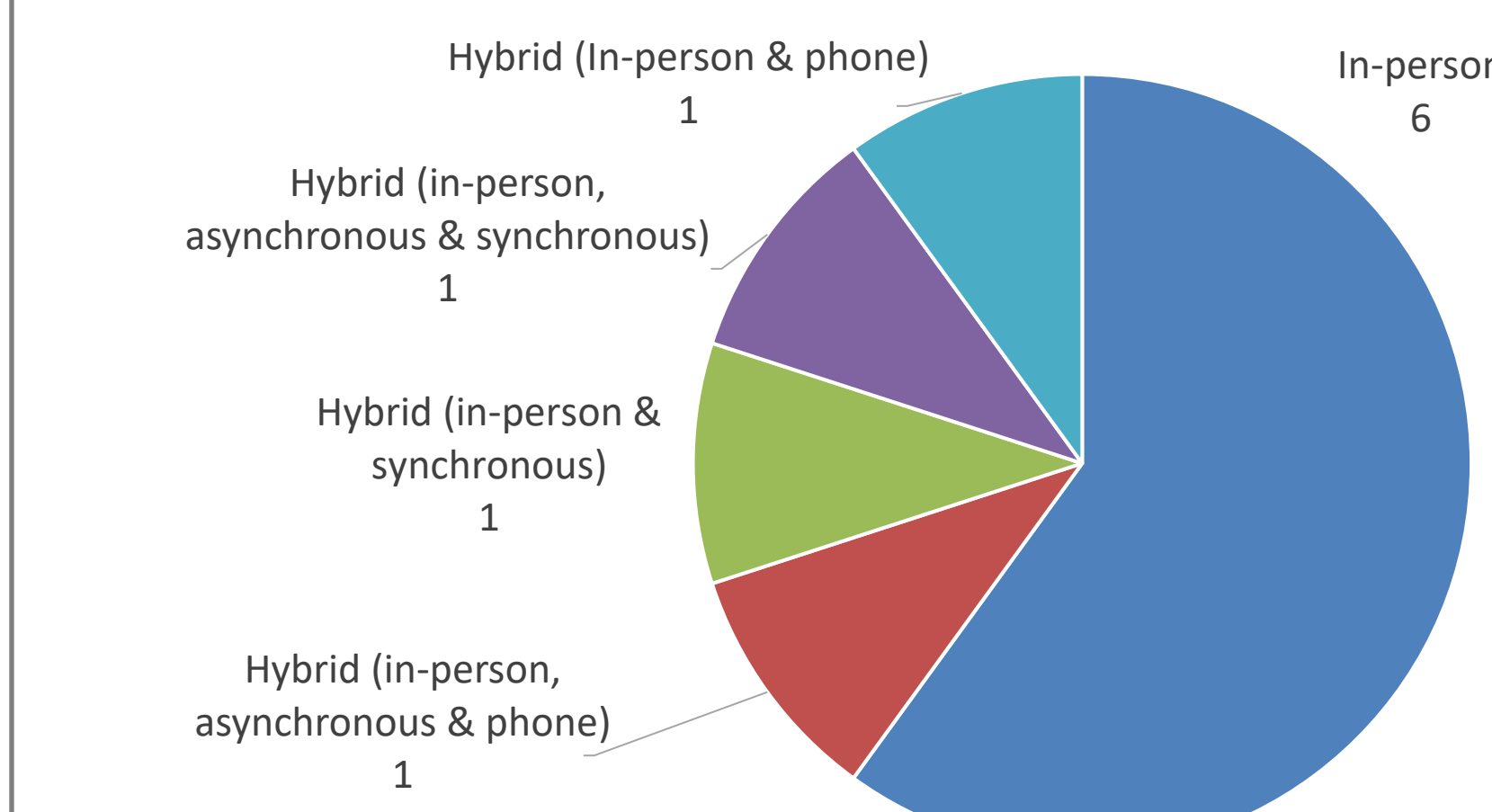


Figure 6: The Delivery Models Represented Across All Articles.

Articles included in this review discussed different forms of collaboration and teamwork (Figure 7). Team meetings were universally used to encourage collaboration. Referrals were also frequently used, facilitating a collaborative approach by leveraging diverse team skills. The use of email and case-specific discussions were less common, likely due to the efficiency of more direct methods.

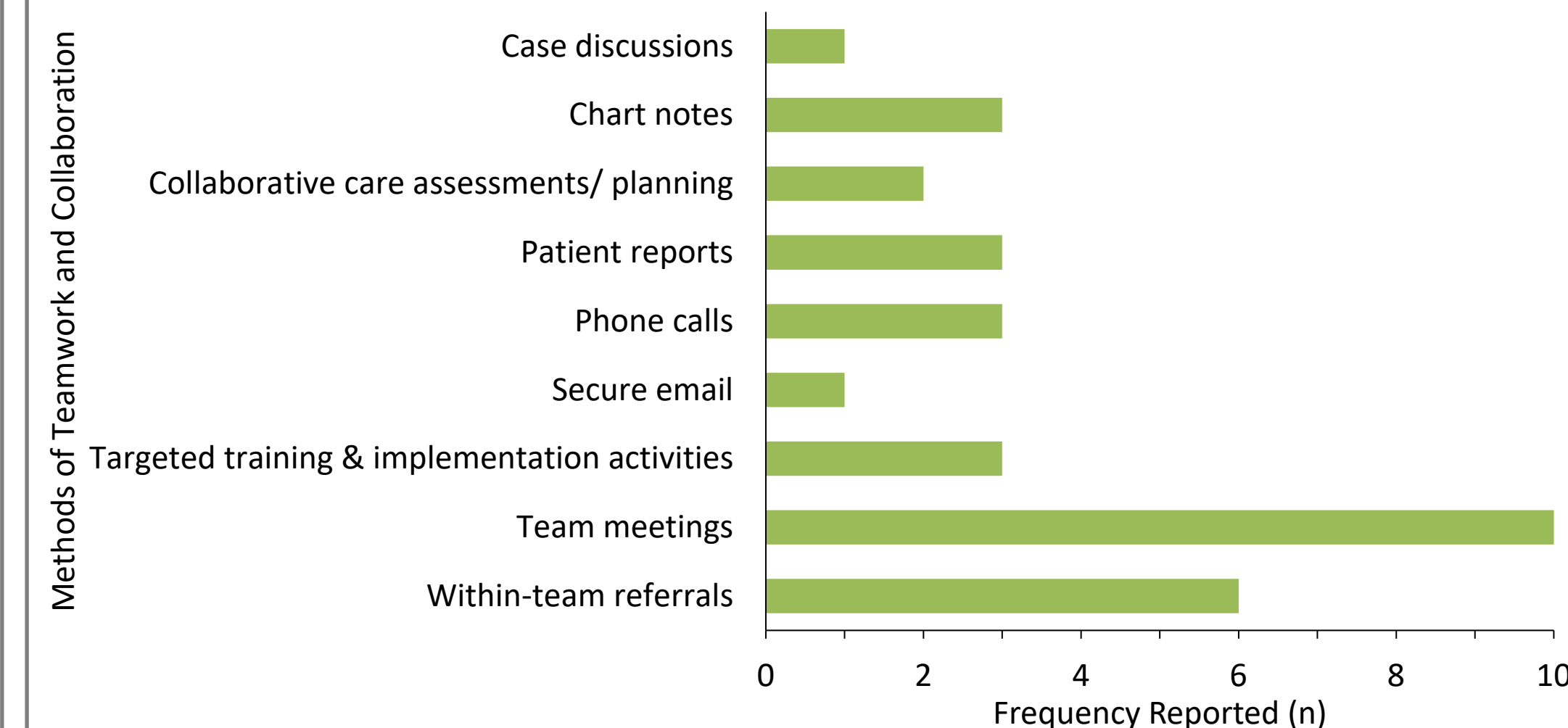
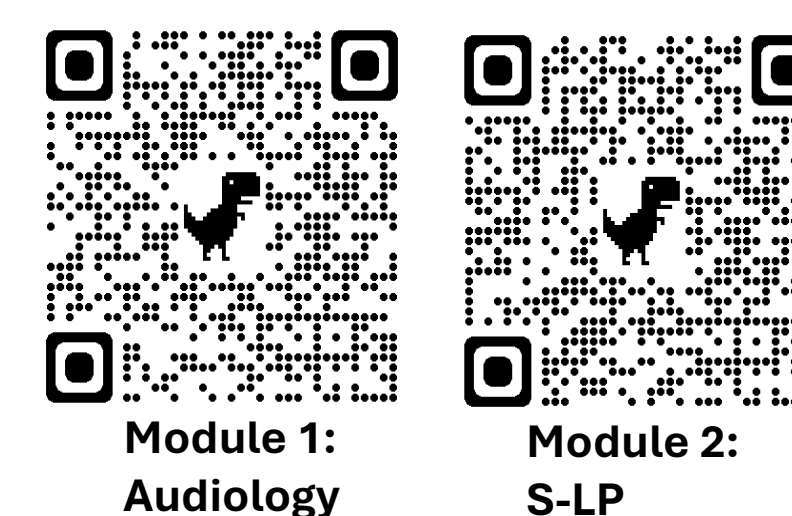


Figure 7: Visual comparison of teamwork and collaboration methods across articles.

NEXT STEPS

This scoping review examined the roles of audiologists and S-LPs in CIPC teams, globally. These professionals had diverse, complementary roles that enhanced team capacity for patient-centered care. Teams with audiologists and/or S-LPs demonstrated improved patient experiences, health outcomes, and promoted health equity, which could potentially reduce health disparities. Thus, the review underscores the ways audiologists and S-LPs can enhance primary care. Lastly, this review sets the foundation for the research team's additional studies. These include evaluating the readiness of Canadian audiologists and S-LPs to participate in CIPC and creating educational modules for primary care providers. These modules explain the roles and scopes of practice of audiologists and S-LPs, and how these roles support the goals of primary care.



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