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PATIENT CARE MANAGERS AND INTEGRATED PROGRESS NOTES DOCUMENTATION IN RELATION TO INTERPROFESSIONAL JOB SATISFACTION: A SYSTEMATIC MIXED STUDIES REVIEW

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Abstract

Effective interprofessional collaboration is increasingly recognized as a key determinant of patient safety, continuity of care, and healthcare worker satisfaction. Within this context, patient care managers and integrated progress notes documentation may function as important mechanisms for coordinating care across disciplines and supporting interprofessional job satisfaction. However, empirical evidence synthesizing the relationship between care coordination roles, shared documentation practices, and job satisfaction remains limited. This systematic mixed studies review aimed to synthesize evidence on the relationship between patient care managers, integrated progress notes documentation, and interprofessional job satisfaction across healthcare settings. A systematic mixed studies review was conducted using a convergent integrated approach. Studies were identified from major databases and screened according to predefined inclusion criteria focused on care coordination roles, integrated progress notes, and interprofessional job satisfaction. The final synthesis included six studies spanning primary care, acute care, geriatric practice, home healthcare, and interprofessional collaboration platforms. The review found that interprofessional job satisfaction was shaped by four interrelated domains: organisational context, digital documentation design, role clarity, and adaptation over time. Integrated progress notes and collaborative documentation systems facilitated communication, reduced duplication, and improved workflow efficiency when aligned with team needs and organisational support. Conversely, role ambiguity, hierarchical relationships, fragmented systems, and resistance to change weakened collaboration and reduced professional satisfaction. Across the included studies, patient care managers emerged as important coordinators who can strengthen shared documentation, promote team cohesion, and support person-centred care. These findings suggest that sustainable improvements require role clarity, shared accountability, interoperable documentation tools, and interprofessional training to strengthen teamwork and workforce well-being.

Keywords: *Patient care managers; integrated progress notes; interprofessional collaboration; job satisfaction.*

INTRODUCTION

The delivery of high-quality healthcare increasingly depends on effective interprofessional collaboration, wherein multiple healthcare professionals coordinate their expertise to optimize patient outcomes (Abdurrouf & Pandin, 2021; O'Donnell et al., 2025). Interprofessional collaboration has been recognized as beneficial not only for patient safety and care quality but also for healthcare providers themselves, contributing to increased job satisfaction and motivation among professionals (McGraw et al., 2025). However, achieving seamless collaboration requires robust communication systems, shared documentation practices, and clearly defined roles within healthcare teams (Lazzari & Rabottini, 2025; Tan et al., 2017).

Documentation serves as a critical mechanism through which interprofessional teams coordinate care. Integrated Patient Progress Notes (IPPNs) represent a documentation approach in which all interactions between patients and healthcare professionals including physicians, nurses, pharmacists, dietitians, and physiotherapists are recorded in a unified format. The implementation of IPPNs has been mandated in several healthcare systems, including Indonesia, as a strategy to enhance care coordination and reduce information gaps (Abdurrouf & Pandin, 2021). Electronic documentation systems have been shown to improve interprofessional communication, enhance compliance

with clinical protocols, and increase healthcare worker satisfaction due to reduced cognitive load and improved quality of care (Nascimento et al., 2023). Nevertheless, challenges persist in documentation practices, including barriers related to time constraints, disagreements in decision-making, and inconsistencies in documentation review processes (Lindqvist et al., 2019).

The quality of clinical documentation is inextricably linked to communication effectiveness within healthcare teams. Poor communication during patient handovers and care transitions has been identified as a major contributor to medical errors, with one review finding that over 7,000 malpractice cases were connected to caregiver miscommunication. Structured communication tools and standardized documentation approaches have therefore been advocated as essential components of patient safety initiatives (Lazzari & Rabottini, 2025; Tan et al., 2017).

Patient care managers play a pivotal role in coordinating care across disciplines, fostering partnerships within multidisciplinary teams, improving patient outcomes, and facilitating system improvements. These professionals, sometimes referred to as nurse navigators or care coordinators, serve as linchpins in ensuring that interprofessional teams function cohesively. The integration of such expert nursing profiles into interprofessional care teams has been associated with significant improvements in patient outcomes, optimization of care pathways, and reduction in healthcare costs (O'Donnell et al., 2025; Vlerick et al., 2023). Effective care coordination requires not only clinical competence but also the ability to navigate complex team dynamics, manage documentation systems, and ensure that all team members contribute meaningfully to shared patient records (Afzal et al., 2018).

Within interprofessional teams, the roles and contributions of various healthcare providers must be clearly understood and respected to facilitate effective collaboration. Research has demonstrated that unclear role definitions, vertical power hierarchies, and limited participation in documentation can undermine team cohesion and individual job satisfaction (Paz et al., 2023) . Conversely, when team members perceive their roles as valued and experience adequate support, autonomy, and opportunities for professional growth, both collaboration and satisfaction improve (Aggarwal et al., 2025) .

Job satisfaction among healthcare professionals is a multifaceted construct influenced by organizational culture, leadership, remuneration, professional development opportunities, and the quality of interprofessional relationships (Aggarwal et al., 2025; Medina-Córdoba et al., 2023). Intrinsic factors such as autonomy, mastery, and sense of purpose have been shown to improve team performance and satisfaction, while extrinsic factors including adequate resources, training, clear protocols, and supportive organizational structures also play critical roles. The implementation of interprofessional education interventions has demonstrated positive effects on organizational climate and culture, though results regarding job satisfaction have been mixed (Aggarwal et al., 2025; Medina-Córdoba et al., 2023; O'Donnell et al., 2025).

Despite growing recognition of the importance of both interprofessional documentation and care coordination roles, there remains a paucity of synthesized evidence examining the intersection of patient care management, integrated progress notes documentation, and interprofessional job satisfaction. Existing systematic reviews have addressed these topics in isolation examining huddles and teamwork (Rowan et al., 2022), interprofessional education and work environment (Medina-Córdoba et al., 2023), remuneration and team incentives (Aggarwal et al., 2023, 2025), or communication tools and patient safety (Lazzari & Rabottini, 2025) but none have comprehensively synthesized evidence on how patient care managers and integrated documentation practices collectively influence job satisfaction across interprofessional teams. Furthermore, the heterogeneity of study designs investigating these phenomena spanning qualitative, quantitative, and mixed-methods approaches necessitates a systematic mixed studies review methodology that can integrate diverse forms of evidence. Mixed-methods systematic reviews, utilizing tools such as the Mixed Methods Appraisal Tool (MMAT) for quality appraisal and convergent integrated designs for data synthesis, offer a rigorous approach to capturing the complexity of these interrelated constructs(Cubelo et al., 2024; Ung et al., 2024; Vlerick et al., 2023).

This systematic mixed studies review aims to synthesize the available evidence on the relationship between patient care managers, integrated progress notes documentation, and interprofessional job satisfaction. By employing a mixed studies review design, this review seeks to integrate quantitative, qualitative, and mixed-methods evidence to provide a comprehensive understanding of how care management roles and documentation practices influence satisfaction among interprofessional healthcare team members. The findings are intended to inform healthcare organizations, policymakers, and educators in designing strategies that optimize both documentation systems and team-based care models to enhance interprofessional job satisfaction and, ultimately, patient care quality.

LITERATURE REVIEW

Interprofessional Collaboration in Healthcare: Conceptual Foundations and Significance

Interprofessional collaboration (IPC) has become a foundational principle in contemporary healthcare delivery, recognized as essential for addressing the increasingly complex needs of patients across diverse clinical settings. Abdurrouf & Pandin (2021) define IPC as the cohesive coordination of services within and across teams, identifying seven programme theory areas that enable successful collaboration, including professional identity and growth, information sharing and care coordination across boundaries, effective operational and clinical governance, and workforce planning and retention. The realist evidence synthesis conducted by these authors demonstrates that when healthcare professionals are enabled to think outside their disciplinary perspectives, positive outcomes emerge, including staff retention, engagement, job satisfaction, and a sense of ownership over team decisions.

The benefits of interprofessional collaboration extend beyond patient outcomes to encompass professional well-being. O'Donnell et al. (2025) note that interprofessional collaboration contributes to increased job satisfaction and motivation among professionals, improved practice quality, and stronger patient engagement in care. Similarly, McGraw et al. (2025), in a comprehensive meta-analysis of 45 articles encompassing 53 independent samples, found that interprofessional work was moderately positively associated with job satisfaction (mean r = .36), autonomy, engagement, and perceived service quality, while being weakly negatively associated with job stress, burnout, and turnover intention. Notably, teamwork—the most intensive form of interprofessional work—promoted lower burnout and turnover intention compared to less intensive forms of collaboration.

Despite these well-documented benefits, achieving effective interprofessional collaboration remains challenging. Tan et al. (2017) identified 13 themes dominating the literature on interprofessional teams, structured around four overarching factors: team-internal procedures and dynamics, communicative processes, organisational and team-extrinsic influences, and patient and staff outcomes. Their review underscores that lack of interprofessional integration and teamwork not only decreases patient care and safety but also increases stress and conflict among team members (Tan et al., 2017). Lazzari & Rabottini (2025) similarly found that while multidisciplinary teamwork strengthens mental well-being and job satisfaction, effective collaboration is difficult to achieve due to structural and process-related barriers, including miscommunication and poor coordination. These authors advocate for a cultural change toward interdisciplinary practice that recognizes the role and contribution of all disciplines involved.

The relationship between IPC and job satisfaction has been further substantiated by Nascimento et al. (2023), who demonstrated through cross-sectional analysis using the Assessment of Interprofessional Team Collaboration Scale (AITCS) that job satisfaction was independently associated with IPC even after accounting for confounding factors such as age, profession, and organizational affiliation. Their findings suggest that healthcare professionals in community hospitals who regard IPC as integral to their role experience higher job satisfaction.

Documentation Practices and Interprofessional Communication

Clinical documentation serves as a critical infrastructure for interprofessional communication, care coordination, and patient safety. The quality and structure of documentation systems profoundly influence how healthcare teams share information, make decisions, and coordinate care across disciplines. Lindqvist et al. (2019) conducted a systematic review examining the effect of electronic health records (EHRs) on interprofessional practice in hospital settings, finding mixed results: studies investigating the EHR alone demonstrated mostly negative or no effects on interprofessional practice (74% of outcomes), whereas EHR enhancements showed more positive results (71% of outcomes). Common concepts identified included sharing of information, visibility of information, closed-loop feedback, decision support, and workflow disruption. Importantly, few studies investigated the effect of EHRs on teamwork and collaboration specifically, with most focusing on communication and coordination outcomes.

The significance of structured communication in documentation is further emphasized by Lazzari & Rabottini (2025), whose systematic review and meta-analysis of the ISBAR (Introduction, Situation, Background, Assessment, and Recommendation) handover approach demonstrated that structured communication tools strengthen communication skills in clinical teams, increase self-confidence and efficacy among practitioners, improve interprofessional communication, reduce medical errors, and enhance patient safety. Their review revealed that over 7,000 malpractice cases were connected to caregiver miscommunication during patient handovers, with approximately 2,000 avoidable deaths and 80% of serious medical errors attributable to communication failures. Furthermore, implementing ISBAR was found to have a positive effect on job satisfaction among healthcare professionals and teams (Vlerick et al., 2023).

Aggarwal et al. (2025) further reinforced the importance of documentation in their scoping review on multidisciplinary teams in primary care, identifying emphasis on documentation and shared patient records with options to flag, escalate, de-escalate, and task requests between providers as key enablers of effective team-based care. However, they also noted that systems lacking interoperability created barriers and fragmentation, necessitating the addition of care coordinators.

Patient Care Managers and Care Coordination Roles

Patient care managers, including nurse navigators, care coordinators, and advanced practice providers, play pivotal roles in facilitating interprofessional collaboration, coordinating documentation, and ensuring continuity of care. Medina-Córdoba et al. (2023) conducted a systematic review of mentoring programmes for specialized nurses (SNs), nurse navigators (NNs), and advanced practice nurses (APNs), finding that the integration of these expert nursing profiles into interprofessional care teams leads to significant improvements in patient outcomes, optimization of patient care pathways, and reduction in healthcare costs. Among the twelve included studies, six reported positive outcomes on job satisfaction, five on job retention, and seven on skills improvement. The authors emphasize that future research should measure the effects of programmes on outcomes at three levels: changes in knowledge, skills, attitudes, and beliefs (including job satisfaction); evaluation of attitudes during interprofessional discussions; and evaluation of impact on the team and organization.

The role of advanced practice providers in interprofessional settings has been explored by Rowan et al. (2022), who conducted semi-structured interviews across two academic institutions, revealing four themes: productivity of the working relationship, inconsistent understandings of the advanced practice provider role in clinical care, mixed experiences relating to colleague support, and the impact of autonomy on satisfaction. Their findings highlight not only a reasonable degree of satisfaction but also the critical need to engage colleagues regarding the advanced practice provider role to allow for better integration into the overall healthcare team.

Aggarwal et al. (2023) developed an initial programme theory for interprofessional case discussions (InCaD) in acute hospital care, identifying nurse leadership as a significant driver of effectiveness. Their realist approach revealed that key staff outcomes included enhanced job satisfaction, team cohesion, and workflow efficiency, while contextual factors such as leadership support and tailored adaptations were crucial for successful implementation. The authors hypothesize that the integration of nurse-led InCaD can have a positive effect on job satisfaction and workload by promoting better care and communication.

METHOD

Study Design and Methodological Framework

To address the multifaceted nature of interprofessional collaboration (IPC) and its impact on documentation and job satisfaction, this study utilizes a Systematic Mixed Studies Review (SMSR) framework. Adhering to the PRISMA 2020 Statement and the PRISMA-P (Protocol) guidelines, this review employs a convergent integrated approach to synthesize diverse evidence types. The strategic importance of an SMSR lies in its ability to minimize "methodological silos" by simultaneously evaluating technical infrastructure and the human relational dynamics of interprofessional satisfaction documented in source context. By integrating quantitative metrics of professional morale with qualitative insights into professional experiences, this framework captures the complex relationship between Patient Care Managers (CMs), digital documentation quality, and the resulting interprofessional job satisfaction.

Search Strategy and Information Sources

The search strategy was analytically formulated to optimize database selection and keyword precision. Searches were conducted across PubMed, Scopus, Google Scholar and CINAHLfor articles published between January 2020 and June 2026, restricted to the English language. The strategic intent behind the Boolean logic was to isolate the specific intersections of nursing informatics, documentation quality, and the resulting professional satisfaction among Care Managers and the broader interprofessional team. The specific search strings and their strategic purposes are detailed in the table below:

Table 1. Boolean Search Logic and Its Strategic Purpose

String ID	Boolean Search Logic	Strategic Purpose
String 1	("nursing informatics" AND "progress notes" AND "interprofessional")	To capture the intersection of digital tools and team communication dynamics, specifically how informatics bridges professional gaps.
String 2	("interprofessional collaboration" AND "documentation quality" AND "job satisfaction")	To evaluate the correlational evidence between documentation output quality and professional morale metrics.
String 3	("progress notes" AND "care manager" AND "satisfaction")	To isolate the specific impact of the Care Manager role on documentation-related professional satisfaction.

Following the execution of these strings, the results were filtered through a rigorous eligibility framework to ensure the inclusion of only high-value, relevant evidence.

Eligibility Criteria: Inclusion and Exclusion Rationale

The eligibility criteria were established to address three core pillars: the role of the Patient Care Manager, the metrics of Interprofessional Collaboration Satisfaction, and the implementation of Integrated Progress Notes. This ensures the findings address the "So What?" layer: determining how digital tools directly influence the efficacy and job satisfaction of the interprofessional team. The inclusion criteria for this study were defined to ensure relevance, transparency, and applicability in global health informatics contexts. Only open-access, peer-reviewed journal articles were included to guarantee reproducibility, particularly in relation to the Taiwanese one-stop collaborative documentation platform. Eligible studies were conducted in primary healthcare (PHC) or acute clinical settings involving multidisciplinary teams, such as general practitioners, nurses, and specialists. The selected literature specifically addressed integrated progress notes or the development of one-stop collaborative documentation systems, with a focus on the role of the Care Manager or its equivalent within team-based care models. Conversely, studies were excluded if they lacked alignment with the core elements of care manager involvement, interprofessional collaboration (IPC) satisfaction, or integrated progress documentation. Additionally, non-open access articles were excluded to maintain full accessibility and enable global peer verification, although this criterion may limit the comprehensiveness of the review.

Study Selection Process (The PRISMA Flow)

The selection lifecycle followed a rigorous pipeline to ensure evidence robustness. To maintain high academic standards, two independent reviewers screened all titles and abstracts, with a third-party adjudicator resolving any discrepancies to ensure inter-rater reliability. The systematic selection process is illustrated in the PRISMA flow diagram (Figure 1). Initially, a total of 386 records were identified through comprehensive database searches. During the identification phase, 32 duplicate records were removed, and 18 records were excluded for other specified reasons before screening commenced. This resulted in 31 records being screened for title and abstract relevance, of which 3 records were excluded.

From the 28 reports sought for retrieval, 3 reports could not be obtained due to the lack of open-access availability, as noted in the search strategy. Consequently, 25 reports were assessed for full-text eligibility. During this stage, 19 reports were excluded based on three primary reasons: 8 reports failed to meet the criteria for Reason 1 (Lack of Focus on Patient Care Managers), 7 reports for Reason 2 (Absence of Interprofessional Job Satisfaction Outcomes), and 4 reports for Reason 3 (Inadequate Discussion of Integrated Progress Notes). These exclusions were primarily due to the studies not addressing the essential triad of patient care managers, interprofessional collaboration satisfaction, and integrated progress notes. After this rigorous filtering process, a final total of 6 studies were deemed eligible and included in the systematic review for qualitative and quantitative synthesis.

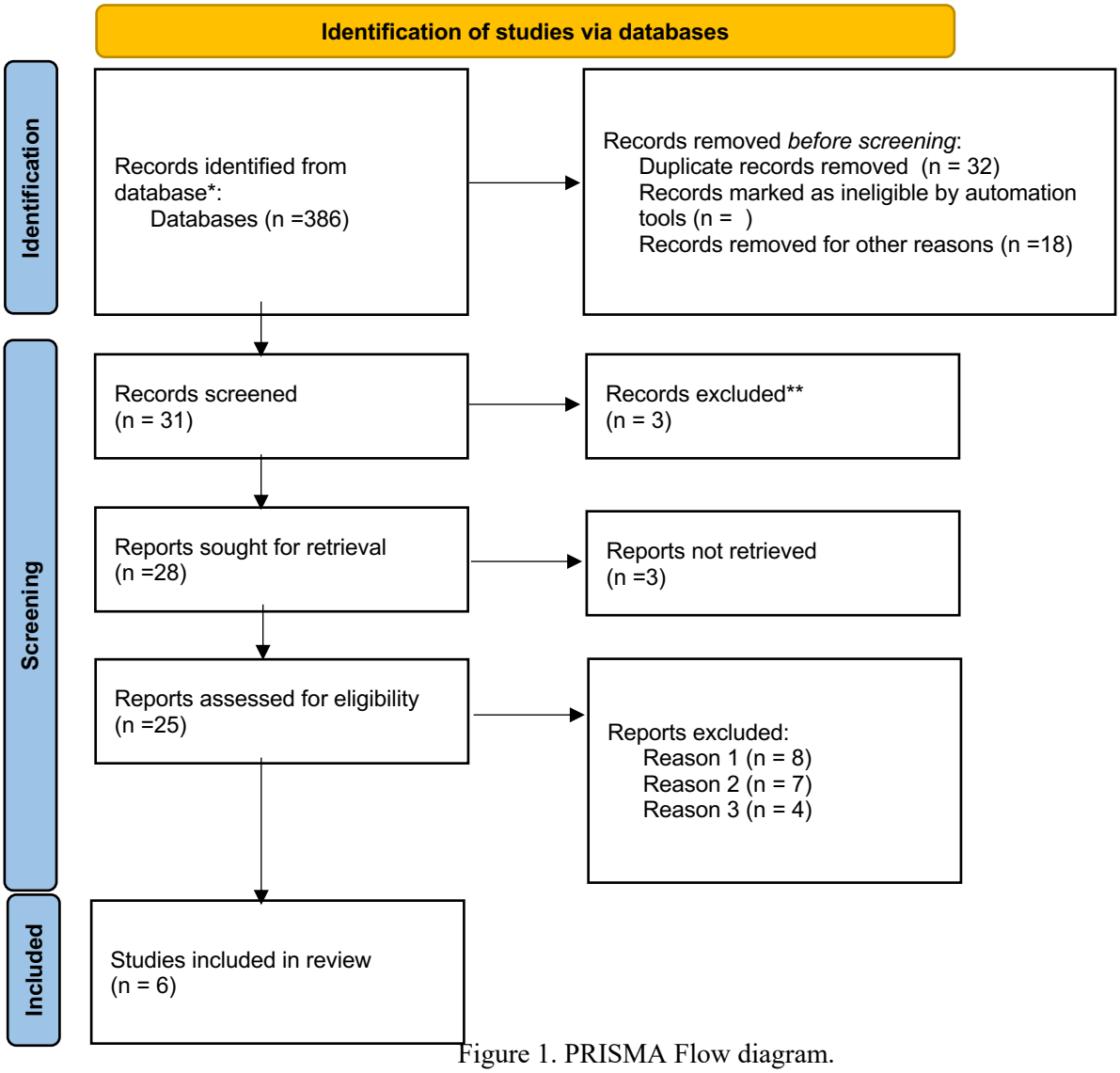

Figure 1. PRISMA Flow diagram.

Data Extraction and Quality Assessment

The data extraction process utilized a systematic approach based on the "spiral-shaped information flow" identified in the Taiwan source context. This flow categorizes data into four distinct phases: (1) care objectives, (2) care plans, (3) treatments, and (4) risks/outcomes. This prioritized extraction ensures that information regarding patient-centered communication and documentation quality is captured chronologically according to the clinical journey.

To ensure the integrity of the findings, the Mixed Methods Appraisal Tool (MMAT) was utilized for quality appraisal. The MMAT was chosen specifically because it allows for the simultaneous appraisal of qualitative, quantitative, and mixed-methods designs, which is a hallmark of SMSR rigor. Each of the 6 selected journals was appraised against these standards to ensure that both the quantitative satisfaction scores and qualitative narratives were derived from robust methodologies.

Data Synthesis and Integration Methods

The final stage of the methodology involved a strategic synthesis of the extracted data using the Matrix Method and Joint Displays to facilitate a holistic view of how Care Managers influence documentation and satisfaction. Reflexive Thematic Analysis (RTA) Drawing from the primary healthcare perspectives identified in the Italy source context, an RTA was applied to the qualitative components to identify latent patterns of meaning. Themes included:

- Role Ambiguity: Tensions regarding professional boundaries and the "ambivalence" of where a physician's intervention ends and a nurse's begins.
- Structural Misalignment: Mismatches between documentation workflows and organizational commitments/staffing shortages.
- Trust Development: Analyzing the Phases of Trust, moving from initial mutual observation and cautious engagement to collaborative cohesion and mutual recognition.

Quantitative Integration and Correlational Mapping Quantitative data, particularly scores related to job satisfaction, were integrated with the qualitative themes. This stage specifically analyzed how "User Resistance to Change" (from the Taiwan context) correlates with "Role Ambiguity" and hierarchical tensions (from the Italy context).

Strategic Synthesis and Validity By mapping quantitative satisfaction trends against qualitative descriptions of "Phases of Trust" and "Structural Misalignment," the review produces an integrated narrative of how digital documentation platforms facilitate or hinder professional morale. This methodology provides a replicable blueprint for future health informatics research, ensuring the validity of the results and their applicability to modern interprofessional practice.

RESULTS AND DISCUSSION

Six studies met the eligibility criteria and were included in the systematic mixed studies review. They collectively address interprofessional collaboration (IPC), digital documentation infrastructures and job satisfaction across primary care, acute hospital care, home healthcare and geriatric practice contexts. Table 2 outlines their methodological characteristics.

Table 2. Methodological Charactristics of Study Reviewed

Reference	Country / setting	Study design	Data sources	Analytic approach	Contribution to SMSR
Cataldo (2022)	United States, academic multispecialty primary care group practice	Exploratory sequential mixed-methods, single embedded case study followed by survey	Semi-structured interviews, naturalistic observations, organisational website review, survey of primary care team members	Braun and Clarke thematic analysis for qualitative phase, cross-case synthesis, Cronbach's alpha and correlation analyses for quantitative phase	Provides mixed-methods evidence on organisational contextual factors that support or hinder IPC, team documentation and perceived collaboration, directly informing the organisational pillar of the SMSR.
Lin et al. (2020)	Taiwan, tertiary hospital (Chi Mei Medical Center)	System development and evaluation study using software development lifecycle and survey	System analysis documents, HIS integration schemas, usage logs, online questionnaire of pilot users	Descriptive statistics, reliability and validity testing (Cronbach's alpha, composite reliability, AVE), partial least squares path modelling	Demonstrates how an integrated IPC platform can operationalise patient-centred documentation and communication, while quantifying the role of perceived usefulness, ease of use and resistance to change in adoption, informing the technology and documentation pillar.

Zadvinskis et al. (2018)	United States, academic medical center medical-surgical unit	Longitudinal phenomenological qualitative study at three time points (3, 9, 18 months)	Semi-structured interviews, field notes, EHR context; 30 interviews with 19 nurses	Socio-technical model guided coding, iterative codebook development, NVivo-supported thematic analysis, network graph visualisation using Gephi	Offers a detailed temporal trajectory of nurses' adaptation to HIT and documentation, capturing how equipment, policies, workflows and interprofessional notes interact with satisfaction, contributing to the human and relational pillar of the SMSR.
Faul et al. (2024)	United States, geriatric-focused primary care clinic in an academic health system	Practice transformation case study guided by Normalization Process Model	Workflow redesign documentation, Epic configuration changes, MyChart usage data, Interprofessional Collaborative Practice Scale scores, patient satisfaction and Index outcomes	Mixed descriptive analysis of patient and portal metrics, pre-post comparison of interprofessional practice scale scores, narrative synthesis using Normalization Process Model constructs	Illustrates how EHR re-engineering and interprofessional training can normalise team-based IPC and documentation, reducing burnout and improving outcomes, strengthening the linkage between digital tools and interprofessional satisfaction in the SMSR.
Dellafiore et al. (2025)	Italy, primary healthcare across three regions (Tuscany, Lombardy, Emilia-Romagna)	Qualitative interpretive study using focus groups and Reflexive Thematic Analysis	Four focus groups (two with GPs, two with FCNs), field notes, verbatim transcripts	Reflexive Thematic Analysis following Braun and Clarke's six phases, RTARG reporting guidelines, iterative theme refinement and member checking	Provides rich qualitative evidence on relational and structural dynamics of GP–FCN collaboration, including role ambiguity, phases of trust and transformation of work practices, contributing to the relational and PHC context pillar of the SMSR.
Wong et al. (2025)	Canada, home healthcare provider organisation (VHA Home HealthCare, Ontario)	Framework development study plus leadership survey and qualitative workshops	Rapid literature review, participatory co-design (Design Day), organisational records, leader surveys (n=52), workshop	Rapid literature review synthesis, participatory co-design documentation, Rigorous and Accelerated Data Reduction technique,	Delivers a context-specific IPC competency framework and identifies enablers and barriers to its implementation in home healthcare, offering a structured

			transcripts (n=38 leaders)	deductive thematic analysis based on COM-B model	lens for mapping IPC competencies in relation to organisational consistency, role clarity and communication within the SMSR.

Implementation and Evaluation of the IPC Platform

The implementation of the "One-Stop" computerized platform at Chi Mei Medical Center was a strategic response to "information silos" caused by over 40 separate Hospital Information Systems (HIS). By centralizing data from emergency, nursing, pharmacy, and nutrition departments, the center aimed to eliminate redundant data entry and establish a common operational picture for the entire interprofessional team (Lin et al., 2020).

The platform's architecture was designed to replace fragmented departmental views with an integrated, patient-centric interface:

- Spiral-Shaped Integrated Care Area: This interface positions the patient icon at the core of a color-coded spiral. Various medical departments are stacked around this center, allowing clinicians to grasp surgery status, rehabilitation progress, and pharmaceutical orders at a single glance.
- Communication Area: Emulating modern social messaging, this area provides real-time updates. Crucially for health informatics, the system includes read verification and department identification, allowing clinicians to confirm which specific team members have reviewed an update. The primary view hosts messages from the previous seven days to ensure focus on current treatments.
- System Positioning: From a health informatics perspective, the platform is strategically positioned as a "convenient communication channel" rather than the legal medical history master file. This distinction avoids the rigid constraints of legal medical records while allowing professionals to import suggestion messages into legal HIS records (e.g., admission notes) to save time and ensure accuracy (Lin et al., 2020).

System evaluation revealed a "high positive appraisal" from medical team members regarding its convenience for decision-making. However, quantitative data also signaled significant "resistance to change," which erodes behavioral intention despite the system's technical merits. This highlights that technical ease-of-use does not bypass established professional hierarchies. To guide practice, the platform formalizes the IPC spiral-shaped information flow through four distinct phases:

- Care Objectives: Establishing the primary clinical goals for the patient.
- Care Plans: Constructing the interprofessional roadmap across disciplines.
- Treatments: Executing real-time clinical interventions.
- Risks and Outcomes: Continuous assessment of complications and success metrics.

While this platform successfully integrated fragmented data, the human and relational factors identified in the Italian primary care context provide the necessary lens to understand why such technical solutions often face professional resistance.

Thematic Analysis of Professional Perspectives

The qualitative investigation by Dellafiore et al. (2025) utilized Reflexive Thematic Analysis (RTA) to understand how General Practitioners (GPs) and Family and Community Nurses (FCNs) experience collaboration. This study emphasizes that IPC is an "evolving process" rather than an administrative status.

Table 3. Thematic Analysis of Professional Perspectives

Theme	Sub-component	Description	Illustrative quote / source
Theme 1: Barriers	Role ambiguity and hierarchies	Persistent uncertainty about boundaries between physician and nurse interventions, with FCNs sometimes perceived primarily as support staff, reinforcing traditional medical hierarchies.	"There is still a bit of fear or difficulty in defining the boundaries… where the doctor intervenes, where and how the nurse intervenes, and there is still a sort of ambivalence." (GP, FG1)
	Structural misalignment	Systemic differences in employment and organisation, where GPs operate as independent contractors and FCNs as institutional employees, leading to misaligned workflows, objectives and contractual expectations.	"Perhaps even a sort of hierarchy is still present in the minds of some, and this becomes a huge limitation." (FCN, FG2)
Theme 2: Facilitators	Generational openness	Younger GPs are more receptive to dialogue and shared work, expressing a preference not to manage complex care "alone", which supports team-based approaches and recognition of FCN expertise.	"There are some young doctors… who are more open to dialogue… they looked favourably on us because they were no longer alone." (FCN, FG3)
	Co-location and informal contact	Shared physical proximity and everyday interactions (for example working in the same facility, having coffee together) help break down mistrust, build familiarity and strengthen informal communication.	"Having had the opportunity to get to know each other and have coffee together, in my opinion, in the initial phase was fundamental." (GP, FG4)
Theme 3: Team-building	Trust development	Team formation proceeds through phases from mutual observation to reciprocal reliance, with time and shared activities (joint visits, meetings) gradually building trust and a sense of belonging.	"Also allow them to get to know us, because only in this way… can we break down resistance and mistrust." (FCN, FG3)
	Reflective problem-solving	Professionals intentionally ask "What is going wrong?" when facing fatigue, conflict or complex cases, using reflection, empathy and open dialogue to recalibrate team responses and maintain cohesion.	"The attitude to reflect and say 'What is going wrong?'… otherwise you do not move forward." (GP, FG4)
Theme 4: Practice transformation	Network action and integrated strategies	Collaboration enables a shift from isolated, profession-specific performances to integrated, community-based strategies in which GPs and FCNs jointly design care pathways, activate local resources and manage previously "unthinkable" cases.	"We are finally able to take charge of previously unthinkable cases… through a network action that was previously unimaginable." and "This is an epochal change." (FCNs, FG4)

Cross-cutting themes: IPC, documentation and job satisfaction

Synthesising across the six studies, four cross-cutting themes emerge that are directly relevant to Patient Care Managers and analogous roles. First, organisational context and culture are foundational determinants of IPC and professional morale. Supportive, patient-centred cultures with clear expectations for teamwork, adequate staffing and visible leadership engagement were consistently associated with stronger collaboration and higher satisfaction, whereas

hierarchical structures, resource inequities and misaligned policies created friction that undermined both IPC and documentation quality (Cataldo, 2022; Lin et al., 2020; Wong et al., 2025).

Second, design and integration of digital documentation platforms shape how professionals experience both collaboration and workload. When documentation systems are integrated, intuitive and aligned with clinical workflows, such as the Taiwanese one-stop platform or the geriatric Epic transformation, they enable rapid information sharing, reduce duplication and support interprofessional decision making. Conversely, fragmented systems and poorly aligned templates, as described by nurses in the HIT adaptation study, generate inefficiency, frustration and initial dissatisfaction that must be actively managed over time (Dellafiore et al., 2025; Faul et al., 2024; Lin et al., 2020; Zadvinskis et al., 2018).

Third, role clarity and competency frameworks are essential for translating technical infrastructures into effective interprofessional practice. Studies of GP–FCN collaboration and the VHA home-care competency framework emphasise that without explicit delineation of roles, shared goals and structured communication routines, IPC is hindered by role ambiguity, "ambivalence" about scope of practice and structural misalignment, even when professionals are motivated to work together. Competency frameworks that address team development, collaborative leadership, communication and conflict resolution provide a scaffold for Care Managers to support integrated practice at individual, team and organisational levels (Dellafiore et al., 2025; Lin et al., 2020; Wong et al., 2025).

Fourth, temporal trajectories of adaptation and satisfaction highlight that job satisfaction and IPC are dynamic rather than static. The nursing HIT study demonstrates a clear pattern in which dissatisfaction peaks during the mid-implementation phase, then declines as systems are adjusted and users adapt, consistent with the "trough of disillusionment" and subsequent "slope of enlightenment" described in technology adoption models. In the geriatric clinic, sustained investment in education, workflow refinement and EHR optimisation leads to improved teamwork scores, reduced burnout and enhanced patient outcomes, indicating that digital tools can become enablers of professional flourishing when embedded in coherent change processes (Faul et al., 2024; Zadvinskis et al., 2018).

Future directions

Future research could build on these findings by examining how Care Manager roles specifically mediate the transition from hierarchical, fragmented practice to collaborative, community-based care in varying policy and organisational contexts. Comparative studies across countries where nurse integration and GP–nurse collaboration are evolving (such as Belgium, Australia and Japan) would help identify transferable strategies and context-specific challenges. Additionally, mixed-methods designs combining direct observation of everyday team interactions with qualitative and survey data could deepen understanding of how communication structures, space and time arrangements, and interprofessional education jointly shape IPC in primary care (Aerts et al., 2020; Lin et al., 2020; McInnes et al., 2017; Morgan et al., 2015; Watanabe et al., 2023).

CONCLUSION

This systematic mixed studies review indicates that interprofessional job satisfaction is not determined by documentation alone, but by the interaction between documentation quality, organisational context, and relational dynamics within the healthcare team. Integrated progress notes can strengthen collaboration by improving visibility of patient care, supporting communication, and reducing duplication of effort, particularly when used in workflows that are perceived as useful and practical by clinicians.

The review also shows that patient care managers have a strategic role in bridging professional boundaries, coordinating shared records, and sustaining communication across disciplines. However, their effectiveness depends on clear role definitions, mutual recognition of expertise, and organisational commitment to collaborative practice. When these conditions are absent, integrated documentation may be experienced as an administrative burden rather than a meaningful support for care delivery and professional satisfaction.

Overall, the findings support the view that improving interprofessional job satisfaction requires more than digital documentation reform alone. Health systems should combine interoperable documentation platforms with team development, leadership support, and interprofessional education to build trust, clarify responsibilities, and promote sustainable collaboration. In this way, patient care managers can function as central agents in enabling coordinated, person-centred, and satisfying interprofessional work.

REFERENCES

Abdurrouf, M., & Pandin, M. G. R. (2021). *Interprofessional Collaboration Improves Patient Safety: A Review*. https://doi.org/10.20944/preprints202104.0230.v1

Aerts, N., Van Bogaert, P., Bastiaens, H., & Peremans, L. (2020). Integration of nurses in general practice: a thematic synthesis of the perspectives of general practitioners, practice nurses and patients living with chronic illness. *Journal of Clinical Nursing*, *29*(1–2), 251–264.

Afzal, A., Stolee, P., Heckman, G., Boscart, V., & Sanyal, C. (2018). The Role of Unregulated Care Providers in Canada—A Scoping Review. *International Journal of Older People Nursing*, *13*(3). https://doi.org/10.1111/opn.12190

Aggarwal, M., Hutchison, B., Kokorelias, K. M., Bilgiç, S., & Glazier, R. H. (2025). The Impact of Remuneration, Extrinsic and Intrinsic Incentives on Interprofessional Primary Care Teams: Results From a Rapid Scoping Review. *BMC Primary Care*, *26*(1). https://doi.org/10.1186/s12875-024-02653-5

Aggarwal, M., Hutchison, B., Kokorelias, K. M., Mehta, K., Greenberg, L. S., Moran, K., Barber, D., & Samson, K. (2023). Impact of Remuneration, Extrinsic and Intrinsic Incentives on Interprofessional Primary Care Teams: Protocol for a Rapid Scoping Review. *BMJ Open*, *13*(6), e072076. https://doi.org/10.1136/bmjopen-2023-072076

Cataldo, J. (2022). Defining a Supportive Organizational Context for IPC in Primary Care: A Mixed Methods Study. *Health, Interprofessional Practice & Education*.

Cubelo, F., Jabri, F. A., Jokiniemi, K., & Turunen, H. (2024). Factors Influencing Job Satisfaction and Professional Competencies in Clinical Practice Among Internationally Educated Nurses During the Migration Journey: A mixed-methods Systematic Review. *Scandinavian Journal of Caring Sciences*, *38*(4), 820–834. https://doi.org/10.1111/scs.13280

Dellafiore, F., Guardamagna, L., Haoufadi, S., Cicognani, A., De Mola, A., Mazzone, B., Occhini, G., Brusini, A., & Artioli, G. (2025). Interprofessional Collaboration in Primary Healthcare: A Qualitative Study of General Practitioners' and Family and Community Nurses' Perspectives in Italy. *Healthcare (Switzerland)*, *13*(21). https://doi.org/10.3390/healthcare13212794

Faul, A. C., D'Ambrosio, J. G., Linzy, K. E., Yankeelov, P. A., Cotton, S. G., Gordon, B. A., & Furman, C. D. (2024). Transforming geriatric practice and workforce development: Leveraging electronic health records to train healthcare teams. *Journal of the American Geriatrics Society*, *72*(S3), S105–S108. https://doi.org/10.1111/jgs.18928

Lazzari, C., & Rabottini, M. (2025). The Use of Introduction, Situation, Background, Assessment, and Recommendation Handover in the COVID-19 Pandemic and Non-Covid Clinical Settings: A Systematic Review and Meta-Analysis. *Frontiers in Health Services*, *5*. https://doi.org/10.3389/frhs.2025.1380948

Lin, H. J., Ko, Y. L., Liu, C. F., Chen, C. J., & Lin, J. J. (2020). Developing and evaluating a one-stop patient-centered interprofessional collaboration platform in taiwan. *Healthcare (Switzerland)*, *8*(3). https://doi.org/10.3390/healthcare8030241

Lindqvist, M. H., Gustafsson, M., & Gallego, G. (2019). Exploring Physicians, Nurses and Ward-Based Pharmacists Working Relationships in a Swedish Inpatient Setting: A Mixed Methods Study. *International Journal of Clinical Pharmacy*, *41*(3), 728–733. https://doi.org/10.1007/s11096-019-00812-8

McGraw, M., Vaillancourt, V. T., Poitras, M.-È., Couturier, Y., Gaboury, I., & Poirier, M.-D. (2025). Chronic Disease Patients' Engagement in Interprofessional Telehealth Collaboration in Primary Care: A Scoping Review. *Journal of Primary Care & Community Health*, *16*. https://doi.org/10.1177/21501319251333858

McInnes, S., Peters, K., Bonney, A., & Halcomb, E. (2017). Understanding collaboration in general practice: a qualitative study. *Family Practice*, *34*(5), 621–626.

Medina-Córdoba, M., Cadavid, S., Espinosa-Aranzales, A.-F., Rojas, K. A., Bermúdez-Hernández, P. A., Torres, D. A. Q., & Dueñas, W. R. R. (2023). The Effect of Interprofessional Education on the Work Environment of Health Professionals: A Scoping Review. *Advances in Health Sciences Education*, *29*(4), 1463–1480. https://doi.org/10.1007/s10459-023-10300-4

Morgan, S., Pullon, S., & McKinlay, E. (2015). Observation of interprofessional collaborative practice in primary care teams: an integrative literature review. *International Journal of Nursing Studies*, *52*(7), 1217–1230.

Nascimento, I. J. B. do, Abdulazeem, H. M., Vasanthan, L., Martínez, E. Z., Zucoloto, M. L., Østengaard, L., Azzopardi-Muscat, N., Zapata, T., & Novillo-Ortiz, D. (2023). The Global Effect of Digital Health Technologies on Health

Workers' Competencies and Health Workplace: An Umbrella Review of Systematic Reviews and Lexical-Based and Sentence-Based Meta-Analysis. *The Lancet Digital Health*, *5*(8), e534–e544. https://doi.org/10.1016/s2589-7500(23)00092-4

O'Donnell, D., Davies, C., Devaney, C., Radomska, A., O'Shea, M., O'Donoghue, G., Brún, A. D., Donnelly, S., Whitty, H., Harnett, P. J., Lang, D., Ahern, E., Hammoud, S., & Shé, É. N. (2025). How Can Interprofessional Collaboration Be Fostered and Sustained in Team-Based Care Integration for Older People in Community Settings? A Realist Evidence Synthesis. *Systematic Reviews*, *14*(1). https://doi.org/10.1186/s13643-025-02862-8

Paz, M., Galdi, R., Staller, K., Thurler, A. H., & Vélez, C. (2023). The Role of the Advanced Practice Provider in a Subspecialty Practice. *Gastroenterology Nursing*, *46*(3), 232–242. https://doi.org/10.1097/sga.0000000000000713

Rowan, B., Anjara, S., Brún, A. D., Kearns, E., Marnane, M., & McAuliffe, É. (2022). The Impact of Huddles on a Multidisciplinary Healthcare Teams' Work Engagement, Teamwork and Job Satisfaction: A Systematic Review. *Journal of Evaluation in Clinical Practice*, *28*(3), 382–393. https://doi.org/10.1111/jep.13648

Tan, T., Zhou, H., & Kelly, M. (2017). Nurse–physician Communication – An Integrated Review. *Journal of Clinical Nursing*, *26*(23–24), 3974–3989. https://doi.org/10.1111/jocn.13832

Ung, D. S. K., Goh, Y. S., Poon, Y.-S. R., Lin, Y. P., Seah, B., López, V., Mikkonen, K., Yong, K. K., & Liaw, S. Y. (2024). Global Migration and Factors Influencing Retention of Asian Internationally Educated Nurses: A Systematic Review. *Human Resources for Health*, *22*(1). https://doi.org/10.1186/s12960-024-00900-5

Vlerick, I., Kinnaer, L., Delbaere, B., Coolbrandt, A., Decoene, E., Thomas, L., Vanderlinde, R., & Hecke, A. V. (2023). Characteristics and Effectiveness of Mentoring Programmes for Specialized and Advanced Practice Nurses: A Systematic Review. *Journal of Advanced Nursing*, *80*(7), 2690–2714. https://doi.org/10.1111/jan.16023

Watanabe, F., Kita, K., Kobayashi, N., Kuroiwa, M., Shimizu, Y., Sekijima, A., Yamashiro, S., & Son, D. (2023). What was happening in the collaboration between general practitioners and public health nurses in the community: A qualitative study. *Journal of General and Family Medicine*, *24*(5), 288–293.

Wong, M. C., D'Souza, J. E., Nizzer, S., Heer, T., Providence, G., Fry, D., Li-James, S., Sundaralingam, B., De Biasio, L., Chan, T. A., Woode, P., & King, E. C. (2025). The VHA Interprofessional Collaboration Competency Framework for Home Healthcare: Development and Implementation Requirements in Ontario, Canada. *Home Health Care Management and Practice*. https://doi.org/10.1177/10848223251354881

Zadvinskis, I. M., Smith, J. G., & Yen, P. Y. (2018). Nurses' experience with health information technology: Longitudinal qualitative study. *JMIR Medical Informatics*, *6*(2). https://doi.org/10.2196/medinform.8734