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Contemporary challenges in european and national health care systems

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Collaborative dynamics within digital health teams

Introduction to Digital Health Teams

- Digital health teams integrate clinical expertise with technological, analytical, and operational skills.
- They collaborate across traditional boundaries to deliver safe, efficient, and data-driven care in increasingly complex environments.
- Their effectiveness depends on communication, coordination, and a shared understanding of digital workflows.

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Why Collaboration Matters in Digital Healthcare

- Digital transformation requires synchronized work across disciplines
- Patient safety depends on accurate, timely information exchange
- Innovation arises from combining clinical, technical, and analytical perspectives
- Coordinated teamwork reduces duplication, delays, and errors
- Data-intensive care requires shared interpretation and joint decisions

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Key Considerations targeting teamwork in digital healthcare

- It becomes clearer why teamwork in digital healthcare settings is both valuable and inherently challenging
- Distinctions are more easily made between complicated systems and genuinely complex ones
- The stages of team development are recognized, along with the ways leadership adapts across them
- Collaborative decision-making is better understood in data-intensive environments

Digital Health as a Complex System

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- Digital healthcare involves interconnected components:
  - Electronic health records (EHR), telehealth platforms
  - AI-enabled decision support and predictive analytics
  - IoT devices and remote monitoring systems
  - Interoperability across hospitals, regions, and sectors

Complex systems are dynamic, non-linear, and require adaptive teamwork to function effectively.

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Benefits of Multidisciplinary Collaboration

- Patient-centred care: multiple perspectives address diverse needs
- Higher quality: integrated decisions reduce omissions or blind spots
- Efficiency: shared workflows prevent redundant tasks
- Innovation: diverse expertise accelerates problem-solving
- Continuity of care: collaboration links all points in the care journey

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Cross-Professional Collaboration in Digital Contexts

- Digital collaboration involves clinicians, nurses, pharmacists, IT specialists, data scientists, engineers, administrators, and designers.

Key characteristics:

- Shared goals aligned with patient outcomes
- Mutual respect between professions
- Understanding of each role's digital responsibilities
- Transparent communication across multiple platforms

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Foundations of Effective Digital Teamwork

- Effective teamwork relies on:
  - Clear task allocation and accountability
  - Access to reliable, high-quality data
  - Structured workflows supported by technology
  - Agreed methods for communication and documentation
  - A culture of trust, openness, and psychological safety

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Team Life Cycle (Tuckman Model)

Forming – orientation and role exploration

Storming – conflict, negotiation, clarification

Norming – agreement on norms, tools, workflows

Performing – high-functioning collaboration

Adjourning – closure, reflection, transition

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Forming: Characteristics

- Uncertainty about goals, expectations, and processes
- Team members explore roles, skills, and responsibilities
- Limited trust and cautious communication
- High reliance on team leader for direction

Digital-specific issues: unfamiliar platforms, variable digital literacy.

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Leadership in the Forming Stage

Effective leadership includes:

- Communicating clear objectives and purpose
- Explaining digital workflows and required tools
- Establishing meeting procedures and communication channels
- Facilitating introductions and role clarification
- Highlighting possible challenges and barriers

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Storming: Characteristics

- Differences in work styles or digital experience emerge
- Conflicts over priorities or approaches
- Subgroups may form based on profession or digital skill level
- Team members test boundaries and leadership style

This stage is normal and essential for developing clarity and alignment.

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Leadership in the Storming Stage

- Maintain active presence; address tensions promptly
- Provide conflict-resolution strategies
- Clarify expectations regarding digital tool usage
- Consolidate communication platforms to reduce fragmentation
- Offer feedback that reinforces collaboration and shared goals

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Norming: Characteristics

- Team members establish shared norms and workflows
- Routines for digital communication become consistent
- Increased trust and interdependence
- Use of digital tools becomes more coordinated
- Team identity and cohesion begin to strengthen



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Leadership in the Norming Stage

- Delegate tasks more confidently
- Encourage accountability and professional autonomy
- Provide constructive feedback in routine check-ins
- Support consistent use of platforms (EHR, messaging, dashboards)
- Reinforce collaborative behaviour and reliability

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Performing: Characteristics

- High coordination, open communication, shared situational awareness
- Data-driven decisions made efficiently
- Minimal supervision needed; strong adaptability
- Team demonstrates resilience and problem-solving capacity
- Interdisciplinary integration is highly effective

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Leadership in the Performing Stage

- Maintain supportive oversight, not micromanagement
- Ensure adherence to team norms and safety procedures
- Protect team cohesion and psychological safety
- Advocate for team recognition at higher organizational levels
- Encourage innovation and ongoing improvement

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Adjourning: Characteristics and Purpose

- Task completion and disbanding or transition of the team
- Opportunity to review outcomes and lessons learned
- Recognition of contributions supports morale
- Reflection informs future teamwork and system improvements
- Important in project-based and digital-implementation teams.

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Belbin's Team Roles in Digital Health

Balanced teams combine roles across three categories:

- **People-oriented**: Coordinator, Teamworker, Resource Investigator
- **Thinking-oriented**: Plant, Monitor–Evaluator, Specialist
- **Action-oriented**: Shaper, Implementer, Completer–Finisher

Each role contributes strengths essential for effective, tech-enabled collaboration.



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Communication in Digital Health Teams

Effective digital communication requires:

- Structured, concise messages
- Traceability within documentation systems
- Secure and compliant information exchange
- Shared language and standardized formats
- Multichannel coordination (EHR notes, secure chats, teleconferencing)

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Data-Driven Collaborative Decision-Making

Teams rely on:

- Real-time clinical and operational data
- Predictive analytics and risk stratification
- Clinical decision support systems (CDS)
- Interprofessional interpretation of complex datasets

Collective sense-making strengthens accuracy and accountability.

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Meeting Management: Purpose and Principles

Meetings should:

- Enable information exchange and alignment
- Support analysis of complex or sensitive issues
- Build shared understanding and commitment
- Integrate digital tools (agenda platforms, shared docs, dashboards)

Poorly structured meetings waste valuable time and disrupt workflows.

Meeting Structure: Four Stages

- **Preparation** – define objectives, share materials in advance
- **Coordination** – manage flow, keep focus, ensure participation
- **Conclusion** – summarize decisions and next steps
- **Verification** – follow-up documentation, accountability checks

Digital tools streamline all four.

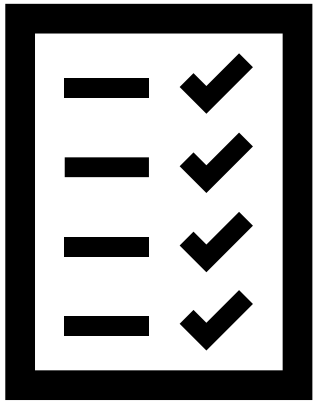


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Giving and Receiving Feedback

Effective feedback in digital teams:



- Uses clear, behaviour-focused language
- Avoids generalizations; emphasises specifics
- Encourages dialogue and reflection
- Relies on structured formats (e.g., SBAR, I-statements)
- Supports skill development, psychological safety, and continuous improvement

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Conclusion

- Collaborative digital teams combine clinical expertise with technology, data literacy, and adaptive leadership.
- Understanding team dynamics, development stages, digital communication, decision-making, and structured meetings enhances effectiveness.
- Strong collaboration leads to safer care, better resource use, and accelerated innovation in modern healthcare systems.

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