



Care Coordination as Part of the Clinical Workflow

Foundational Curriculum:
Cluster 2: Clinical Process

Module 3: Business Process and Clinical Workflow Design

Unit 2: Care Coordination as Part of the Clinical Workflow

FC-C2M3U2

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Unit Objectives

- Name the dimensions of care coordination
- Describe the dimensions of care coordination
- Relate examples of the importance of integrated, coordinated care
- Describe the ways in which eHealth/health informatics supports successful healthcare outcomes



The Dimensions of Care Coordination



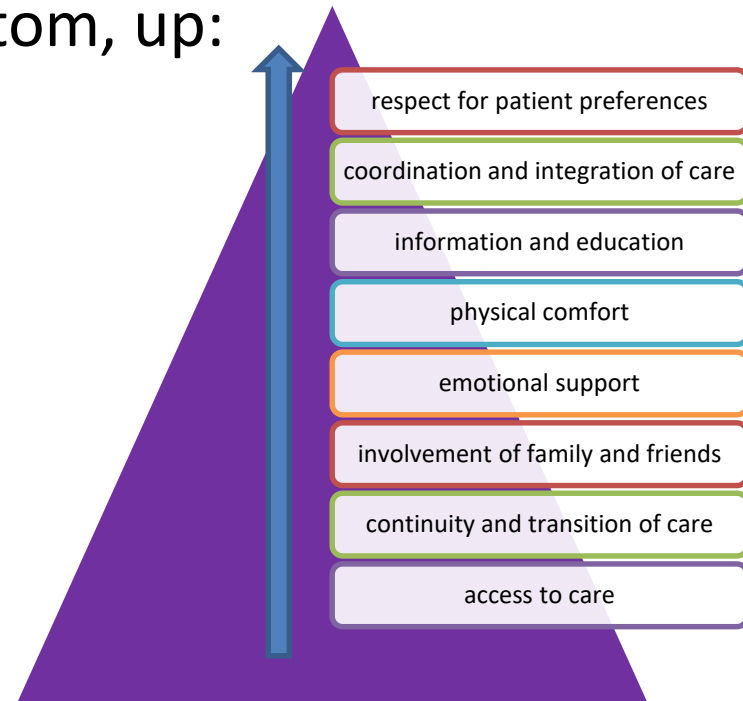
- **Care coordination**, or continuity of care, is deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care
 - Technology can help significantly with care coordination, transforming healthcare facilities and helping them realize their ambitions to engage patients and significantly improve outcomes
- Patient-centered care is the practice of caring for patients (and their families) in ways that are meaningful and valuable to the individual patient
 - It includes listening to, informing and involving patients in their care
 - At a global level, there is a need to empower patients to take an active role in their care planning
- The IOM (Institute of Medicine) defines patient-centered care as: “Providing care that is respectful of, and responsive to, individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions”
- The Picker Institute* and The Commonwealth Fund in conjunction with researchers from Harvard medical school define seven primary dimensions of patient-centered care. Those merged into eight principles to form a total of eight dimensions of care coordination.

From <http://www.pickerinstitute.org/about/picker-principles/> Retrieved 29 November 2017



The Dimensions of Care Coordination (cont'd)

- There are eight dimensions of care coordination, according to research done by the Picker Institute and Harvard Medical School
- These dimensions include, from bottom, up:
 - access to care
 - continuity and transition of care
 - involvement of family and friends
 - emotional support
 - physical comfort
 - information and education
 - coordination and integration of care
 - respect for patient preferences



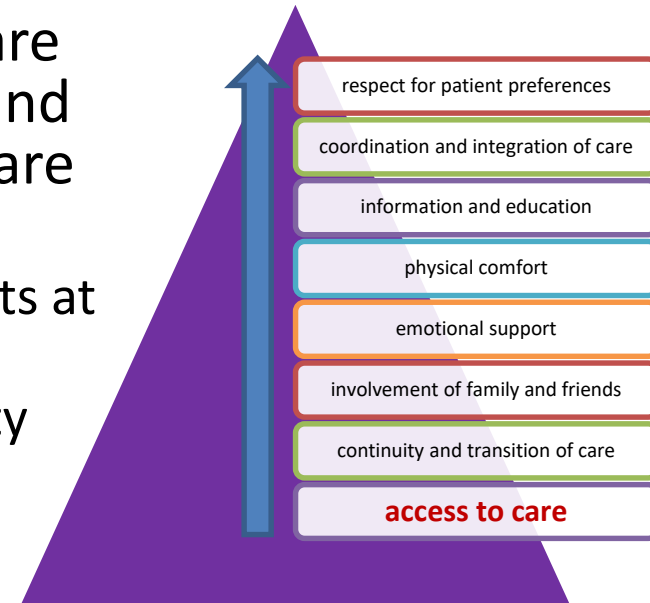


The Dimensions of Care Coordination (cont'd)



Access to care

- Patients need to know they can access care when it is needed. Information systems and technology can help facilitate access to care in the following ways:
 - Providing online scheduling of appointments at hospitals, clinics and physician offices
 - Better accessibility to specialists or specialty services:
 - enhancing the specialist referral process transmitting requests directly to the referral physician
 - transmitting hospital discharge summary reports to the primary care physician at the time of discharge
 - immediate scheduling of follow-up appointments
 - Direct messages to primary care physicians notifying them of patient admissions to hospitals or emergency room visits, contributing to continuity of care

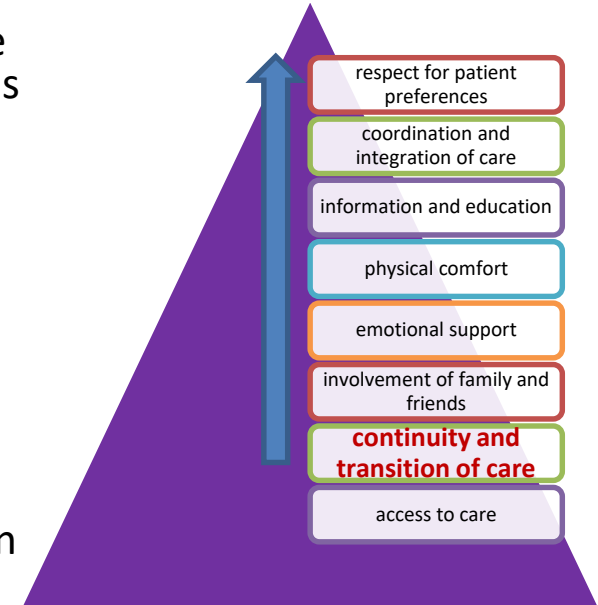




The Dimensions of Care Coordination (cont'd)

Continuity and Transition of Care

- Patients have concerns about their ability to care for themselves after hospital discharge. Also, continuity of care between care episodes decreases the need for readmissions and improves health
- Following are common transition of care points, where continuity is important:
 - Provider to provider (within facility)
 - Care area to care area (within facility)
 - Facility to facility transfer
 - Admission to facility from home (primary care provider to hospital care)
 - Discharge home (hospital care to primary care provider).
- Patient care during transitions can be helped by information systems and technology in the following ways:
 - Using inpatient and ambulatory EHRs to provide understandable, detailed instructions and information regarding medications, physical limitations, dietary needs, etc.
 - Coordination and planning of ongoing treatment and services after discharge with eHealth enabled staff such as home health nurses and aides
 - Provision of information regarding online access to clinical, social, physical and other on a continuing basis
 - Reconciliation of medications, problem lists, diagnoses and treatments given at every episode of care



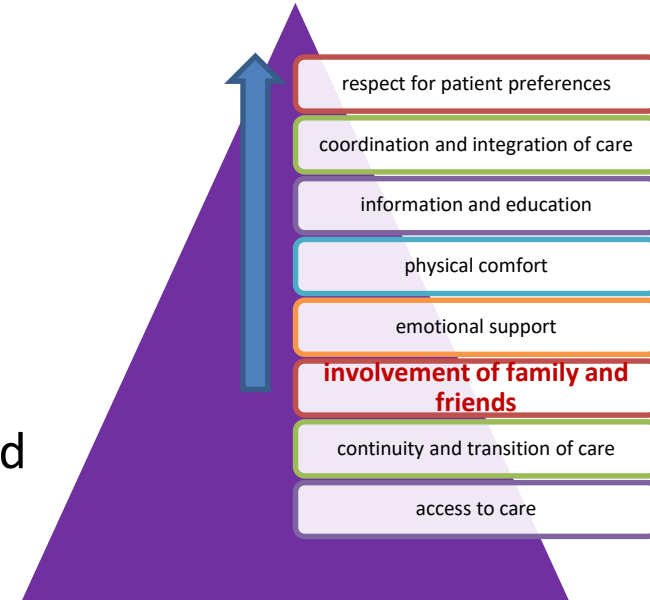


The Dimensions of Care Coordination (cont'd)



Involvement of family and friends

- The role of family and friends plays an important part in the patient experience. Family dimensions of patient-centered care that can be enhanced by information systems and technology were identified as follows:
 - Providing online information and education about general health conditions for family and friends
 - Involving family and close friends in decision making, using technology when possible
 - Supporting family members as caregivers, and providing them with resources for obtaining the necessary digital skills for eHealth care-giving
 - Developing interactive health applications and technologies that include family and friends as appropriate



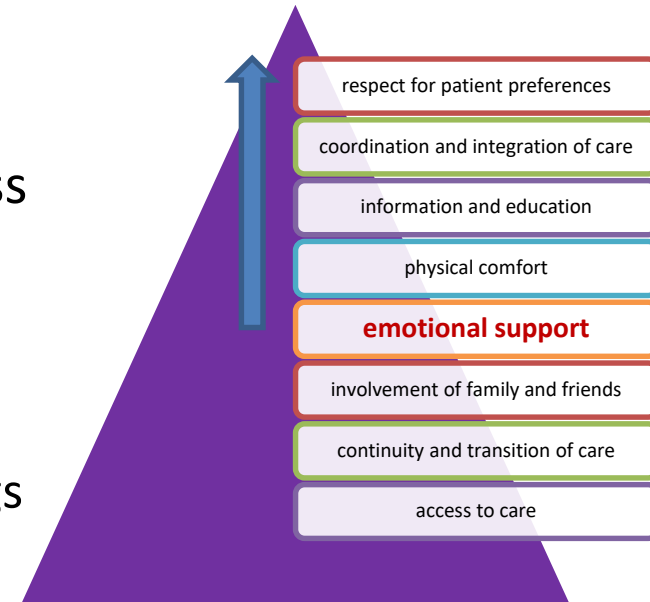


The Dimensions of Care Coordination (cont'd)



Emotional Support

- Patients need emotional support before, during and after healthcare encounters. Often, fear and anxiety associated with illness can be as debilitating as the physical effects.
- Technology and information systems can be employed to help with emotional support in the following ways:
 - Provide access to online groups, forums, blogs and other resources to help discuss fears or anxiety regarding physical and emotional status, diagnosis, treatment plans, and prognosis
 - Provide online access to physician's office between encounters through emails, messaging, etc.
 - Ensuring behavioral professionals have eHealth and digital skills



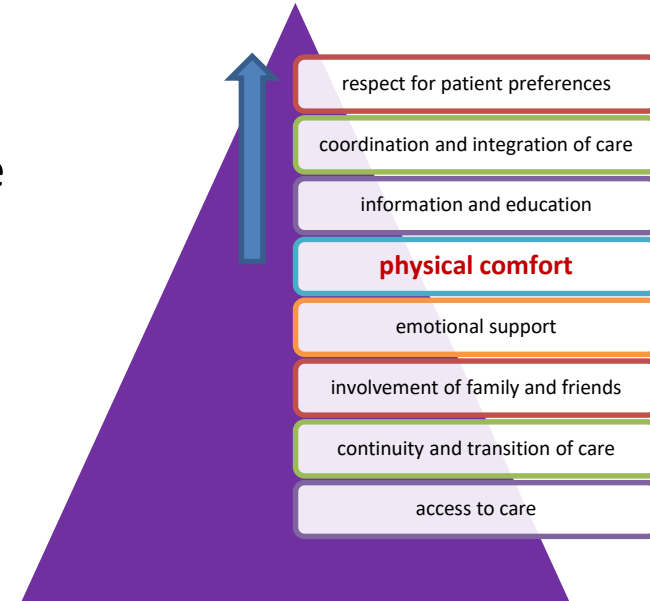


The Dimensions of Care Coordination (cont'd)



Physical Comfort

- The level of physical comfort patients experience before, during and after healthcare encounters has a significant impact on their experience. Three areas were reported as particularly important to patients:
 - Pain management
 - Assistance with activities and daily living needs
 - Hospital surroundings and environment
- These areas can be enhanced by information systems and technology in the following ways:
 - Electronic prescription ordering and refills can assist with some pain management issues
 - Applications and telemedicine can be used to monitor and assist with activities of daily living, such as medication reminders, diabetic reminders, etc.
 - Access to technology and the internet within the hospital setting can enhance some patients' healthcare experience



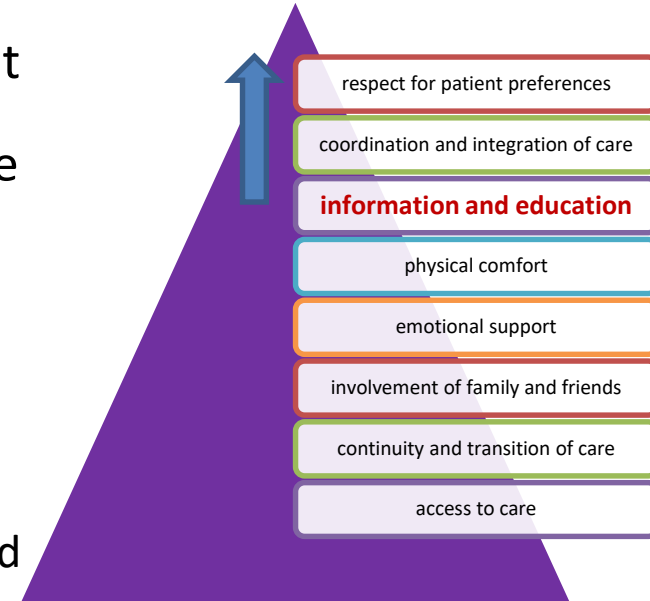


The Dimensions of Care Coordination (cont'd)



Information and Education

- Patients require being completely informed about their condition or prognosis, and can experience fear or anxiety when they are uninformed or have unclear expectations about their condition.
- Technology and information can help with these types of communication and education:
 - Provide online information on clinical status, progress and prognosis
 - Offer online information on processes of care
 - Provide online communications from providers and caregivers regarding laboratory and test results, upcoming appointments, and needed visits or check-ups
 - Deliver educational resources that facilitate health knowledge, health improvement, self-care and health promotion



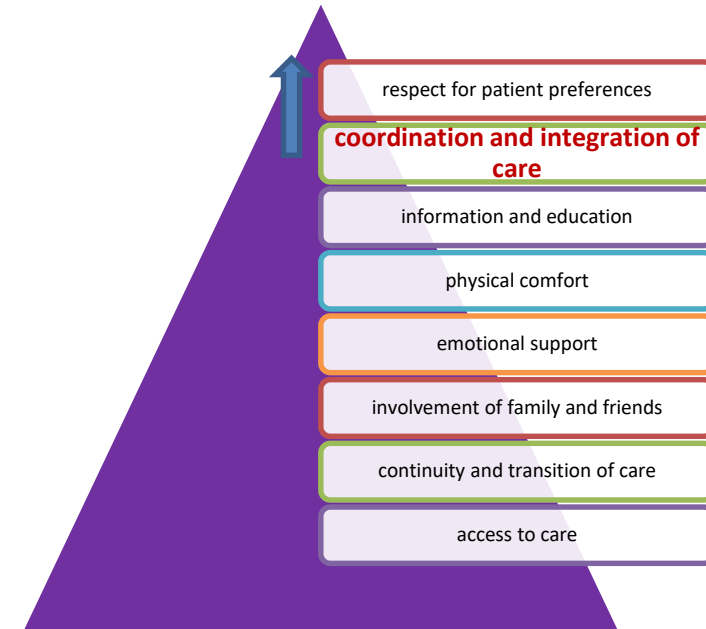


The Dimensions of Care Coordination (cont'd)



Coordination and Integration of Care

- Patients often feel vulnerable and powerless when ill. Proper coordination and integration of care can lessen those feelings.
- Technology and information systems can help coordinate and integrate care in the following ways:
 - Coordinate care between clinical providers by notifying all of a patient's providers when an acute care encounter has occurred, such as an emergency room visit or hospital admission
 - Coordinate ancillary and support services, such as electronic scheduling of radiology and laboratory exams
 - Integration of clinical pathway reports into the care process
 - Utilize the EHR as an interdisciplinary care planning tool



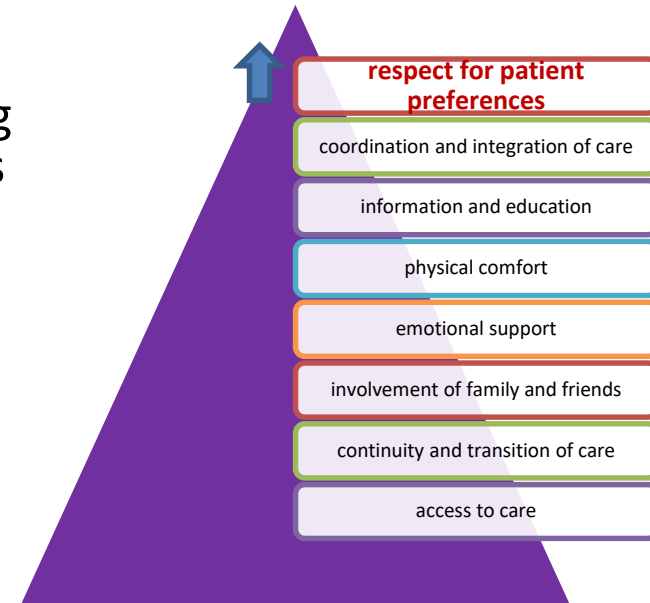


The Dimensions of Care Coordination (cont'd)



Respect for Patient Preferences

- Having respect for patient preferences includes involving patients in decision-making, recognizing they are individuals with their own unique values and preferences.
- Treating patients with dignity and sensitivity to his/her cultural values and autonomy is an important part of respect.
- Technology and information systems can help ensure patient preferences are honored in the following ways:
 - Making sure communication with patients is via their preferred method, whether that is electronically, by post or by telephone
 - Ensuring patient primary language is used with all communications
 - Displaying patient preferences in the EHR when the patient record is open





The Importance of Integrated, Coordinated Care



- The best patient-centered clinical outcomes are achieved by superior care coordination provided by high-performing and integrated interdisciplinary teams
- These teams use information technology, people skills, and available resources to improve quality
- They also eliminate barriers to quality and safety



The Importance of Integrated, Coordinated Care (cont'd)



- Examples of technology-supported interdisciplinary care coordination tools include the following:
 - **Process-oriented information tools:** help improve communication during multidisciplinary **rounding** (presenting medical problems and treatment of a patient to a group of doctors, residents or medical students) by information organization, communication, and worklist management
 - **Computerized rounding and sign-off/sign-out tools:** help providers organize care before they round by automatically importing important patient data from the Electronic Health Record and either displaying them or printing them out in a condensed format
 - **Daily goals forms, worklists, and discharge needs assessment tools:** electronic tools that are developed to facilitate communication and information sharing by providing summary information and explicitly requiring providers to identify goals for each patient
 - **Personal worklists and informal notes:** other electronic tools that help to manage the work and are regarded as temporary work aids





The Importance of Integrated, Coordinated Care (cont'd)



- **Multidisciplinary rounds:** allow the diverse members of the patient's care team to meet and communicate, coordinate patient care, make joint decisions, and manage their work. Most of the information accessed during rounds include information about medications, vital signs, and laboratory test results
- **Variance tracking forms:** track variances in patient outcomes from those expected in clinical pathways
- **Status and progress notes:** document encounters in the ambulatory setting and in the acute setting during rounds, and are related to the patient's status, progress and plan of care
- **Flow sheets:** used to document and track discharge planning activities
- **Bedside monitoring devices:** obtain information directly through device interfaces and can pull in vital signs from physiological monitors, ventilator settings and respiratory status, as well as doses of medication drips



How HIT/eHealth/Health Informatics Supports Successful Healthcare Outcomes Through Patient-Centered Care



- eHealth and health informatics can support patient-centered care in many ways
- The electronic health record, for example, can facilitate care coordination and increase access to information
- There are several studies that indicate there is growth and development in seven informatics areas within patient-centered care¹:
 - **clinical decision support:** systems that aim to improve decision making around diagnosis (clinical prediction rules), prevention and disease management (routine care reminders to doctors or patients), and treatment (electronic medication prescribing)
 - **electronic patient registries:** applications that define patients with specific conditions while also specifying their disease status. Some registries also include tools that facilitate disease management.
 - **interdisciplinary team care:** patient care involves the entire patient, not only their affliction, and involves many different types of care providers such as physicians, nurses, pharmacists, medical assistants, specialists, social workers and others

Demiris, G., and L. Kneale. "Informatics Systems and Tools to Facilitate Patient-Centered Care Coordination." *Yearbook of Medical Informatics* 10.1 (2015): 15–21. PMC. Web. 8 Dec. 2017.



Successful Healthcare Outcomes Through Patient-Centered eHealth Care (cont'd)



- **care transitions:** transitions of care from an acute care facility to home, to primary care, to emergency room, to skilled nursing facilities, and to other healthcare settings
- **personal health records:** electronic applications through which individuals can access, manage, and share their health information and that of others for whom they are authorized, in a private, secure, and confidential environment
- **telehealth/telemedicine:** the provision of healthcare remotely, or the remote diagnosis and treatment of patients, by means of telecommunications technology
- **measurement:** frameworks that assess the quantity/level/rate, quality, or degree of patient-centered care components, such as safety, satisfaction, laboratory readings, infection control, medication or instructions compliance, etc.



Successful Healthcare Outcomes Through Patient-Centered eHealth Care (cont'd)

- These seven areas can be further broken down:
 - two are sub-goals of patient-centered care: team care and care transitions
 - three are means to achieve interdisciplinary care and continuity of care goals: clinical decision support, personal health records, and telehealth/telemedicine
 - two are means to address quality improvement: registries and measurement





Unit Review Checklist

- Named the dimensions of care coordination (BB03)
- Described the dimensions of care coordination
- Related examples of the importance of integrated, coordinated care
- Described the ways in which eHealth/health informatics supports successful healthcare outcomes (BL01)



Unit Review Exercise/Activity

1. Identify the three technology-supported interdisciplinary care coordination tools that are used during provider rounds
2. Name the three informatics areas that are means to achieve interdisciplinary care and continuity of care goals



Unit Exam



1. “The practice of caring for patients (and their families) in ways that are meaningful and valuable to the individual patient” describes what concept:
 - a. telehealth
 - b. continuity of care
 - c. patient-centered care
 - d. care coordination

2. Patient access to care as a part of care coordination would include which of the following technology or information system components:
 - a. Ensuring behavioral professionals have eHealth and digital skills
 - b. Transmission of hospital discharge summary reports directly to the primary care physician at the time of discharge
 - c. Integration of clinical pathway reports into the care process
 - d. Displaying patient preferences in the EHR when the patient record is open



Unit Exam (cont'd)



3. Which of the following dimensions of care would help ensure that patients are involved in decision-making, recognizing they are individuals with their own unique values?
 - a. Emotional support
 - b. Physical comfort
 - c. Integration of care
 - d. Patient preferences
4. Which of the following statements describe bedside monitoring devices?
 - a. The information accessed includes information about medications, vital signs, and laboratory test results
 - b. They are electronic tools that are developed to facilitate communication and information sharing by providing summary information and explicitly requiring providers to identify goals for each patient
 - c. They are used to obtain information directly through device interfaces and can pull in vital signs from physiological monitors, ventilator settings and respiratory status
 - d. Bedside monitoring devices are used to document and track discharge planning activities



Unit Exam (cont'd)



5. The eHealth/informatics area that supports care coordination in the manner that would enable a physician to track infection rates on discharged patients is which of the following:
- a. measurement
 - b. clinical decision support
 - c. telehealth
 - d. personal health records