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System Capacity Initiative: From Inquiry to Implementation

HCT in 2020
System Capacity Initiative

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BACKGROUND

Hematopoietic cell transplantation (HCT) is a curative therapy for many patients with life-threatening malignant and non-malignant diseases. More than 20,000 HCTs are performed in the U.S. each year and this number is expected to double by 2020. Workforce shortages and lack of adequate infrastructure are among the major challenges to the future growth of HCT. The HCT in 2020: A System Capacity Initiative (SCI) is a multi-year program, sponsored by the National Marrow Donor Program® (NMDP), to increase access to HCT therapy for all patients who are in need of this curative therapy.

OBJECTIVE

To conduct needs assessments regarding workforce and infrastructure (Year I); analyze data, develop recommendations for pilot projects and establish metrics for program evaluation (Year II); and implement pilot projects, disseminate findings and strengthen partnerships to ensure sustainability of SCI efforts beyond Year III.

METHODS

A deliberative process model was used to engage professional organizations, experts and stakeholders in a national collaborative effort (Figure 1).[1, 2] The steering committee oversaw seven working groups (WG), each deliberating via monthly conference calls over the course of a year and convening for annual symposia. WG recommendations were presented, discussed and prioritized using audience polling, dialogue and roundtable discussions (Figure 2).

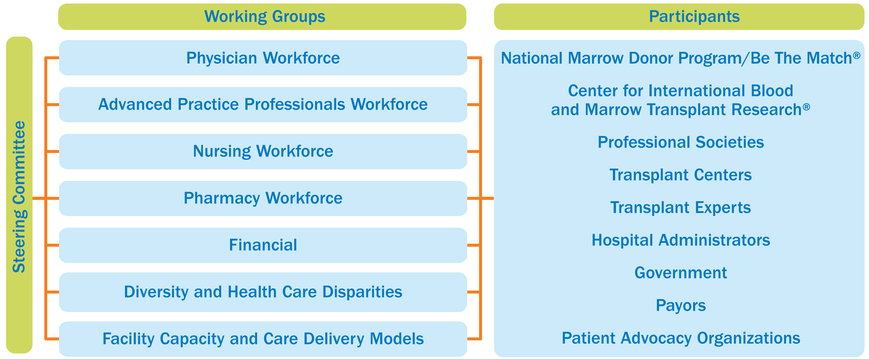
RESULTS

In Year I, needs assessments were conducted by each WG to identify gaps in the system and potential solutions. Key themes included workforce recruitment, retention and diversity, need to benchmark transplant center organizational structures, transplant centers' market potential, a model payor benefit set and effective care delivery models.[1]

Year II analyses resulted in prioritized recommendations for pilot projects, partnerships with professional organizations and a health services research agenda including the translation of research to care delivery.[3] Prioritization was based on impact, stakeholder partnerships and completion time frame. Current deliberations (Year III) resulted in the implementation of pilot projects, further engagement of stakeholders to sustain projects (Figure 3) and increased dissemination efforts. Examples include:

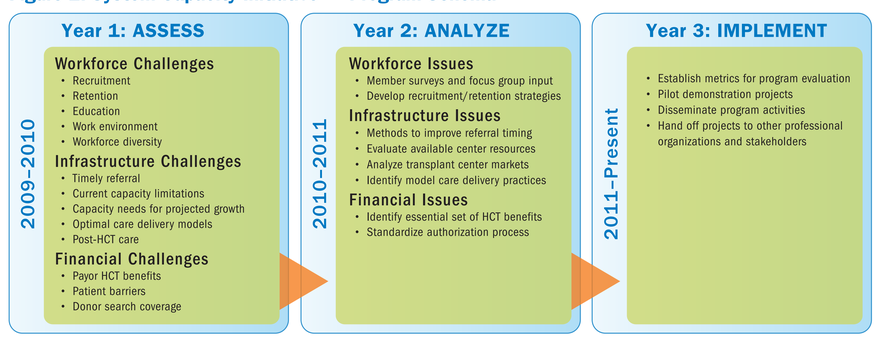
- Creation and promotion of Payor Resources available online at: marrow.org/reimbursement
- Development of a multidisciplinary rounds model to address ethical/moral distress and compassion fatigue among HCT health care professionals
- Engagement of transplant centers to better understand respective market demographics and adopt strategies to address the unmet need for HCT

Figure 1: System Capacity Initiative — Program Organization and Participants



Adapted from Majhail NS, Chell JW, Snyder EL. Addressing Workforce and Infrastructure Challenges to the Growth of Hematopoietic Cell Transplantation: The System Capacity Initiative. *The Hematologist.* 2012;9(3):14.

Figure 2: System Capacity Initiative — Program Schema



Adapted from Majhail NS, Chell JW, Snyder EL. Addressing Workforce and Infrastructure Challenges to the Growth of Hematopoietic Cell Transplantation: The System Capacity Initiative. *The Hematologist.* 2012;9(3):14.

Figure 3: System Capacity Initiative — Professional Organizations and Stakeholder Engagement

RESULTS, continued

- Outreach to students in accredited nursing, physician assistant, nurse practitioner and pharmacy programs to identify motivators for students considering HCT as a career option
- Establishment of a national HCT advanced practice professionals special interest group (SIG) through American Society for Blood and Marrow Transplantation (ASBMT) to provide a forum for the exchange of information and development opportunities
- Identification of best practices in delivering HCT pharmacy services to maximize capacity and streamline processes

IMPLICATIONS

To ensure the appropriate stewardship of the SCI recommendations going forward, strategic activities will aim to maintain stakeholder engagement, resolve barriers to implementation and evaluate the progress of the priority initiatives adopted.

With the growing health care needs of the U.S. population, systems thinking is needed to address the workforce and infrastructure challenges among many medical specialties and public health in general. The SCI is a successful and innovative model that can be utilized to engage broad groups of stakeholders at the national level, identify and prioritize potential solutions, establish benchmarks and evaluation metrics, implement and assess pilot programs, and bridge partnerships to ensure sustainability.

ACKNOWLEDGEMENTS

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FOR MORE INFORMATION OR FEEDBACK

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