

Table 3

Core and Peripheral Factors for the Implementation of Collection of Data on Social Determinants of Health in the Electronic Health Record

| Domain | Core Factors | Peripheral Factors |
|------------------------------|--|--|
| Characteristic of innovation | <p>Use SDH data for population health approaches and improving quality of care</p> <ul style="list-style-type: none"> • Merge SDH data with quality metrics to inform quality improvement programs • Have a defined team summarizing, reporting, and reacting to the data • Improve patient-physician communication during encounters • Include SDH analyses in institutional needs assessments | <p>Technological infrastructure to allow use of data by clinicians</p> <ul style="list-style-type: none"> • Have platforms that allow physicians to analyze their own panels • Not pivotal for success <p>Collection of data in ways that are relevant/sensitive to the population</p> <ul style="list-style-type: none"> • Have Spanish or Creole versions • Collect data on determinants that are relevant to migrants |
| | <p>Collect survey without interfering with regular operations</p> <ul style="list-style-type: none"> • Maximize technology-based collection strategies • Do not rely on registration personnel | <p>Merging data to biobank repositories or other research datasets</p> <ul style="list-style-type: none"> • Although valuable for research community, not pivotal for the implementation of the innovation |
| External environment | <p>Increase awareness regarding impact of SDH on outcomes and costs</p> <ul style="list-style-type: none"> • Increasing value placed on improving and monitoring outcomes • Importance of patient-physician communication • Increasing healthcare costs • Evidence is a strong driver | <p>Calls to action for including SDH on EHR</p> <ul style="list-style-type: none"> • Position statements by different organizations contribute to but are not a driver of implementation • Ability to inform policy makers of resources needed to care for patients with social risk factors |
| | <p>Reimbursement policies</p> <ul style="list-style-type: none"> • Incentives to improve quality of care and reduce costs facilitate diffusion | <p>Meaningful Use of EHR</p> <ul style="list-style-type: none"> • Data collection capabilities of EHRs facilitate Meaningful Use, but this benefit is not pivotal |
| Internal environment | <p>Strong leadership commitment with aligned values</p> <ul style="list-style-type: none"> • Preventive culture: interest in use of population health approaches for prevention, clarity of expectations • Champions of SDH data collection with leadership roles, ensuring SDH data firewall • Interest in becoming an accountable care organization • Report of quality metrics | <p>Highly technological setup</p> <ul style="list-style-type: none"> • The health system's investment in IT resources and personnel significantly facilitates but is not a driver of the innovation <p>Data-oriented institutional culture</p> <ul style="list-style-type: none"> • For a health system used to evaluating quantitative or qualitative data for quality improvement, the use of SDH data would be an easier transition |
| | <p>Healthcare model</p> <ul style="list-style-type: none"> • Capitated model provides incentives to invest in non-health-related services to improve quality and reduce preventable admissions • Incentives for fee-for-service models need to be more clearly described and presented | <p>Legal/privacy culture and resources</p> <ul style="list-style-type: none"> • Institutions with a track record of health services research would be familiar with strategies to address privacy or legal concerns of data use for quality improvement • Having buy-in from privacy offices would help find solutions |

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|---------------------------|---|--|
| Process of implementation | Dedication of personnel exclusively to the innovation | Practice-based IT resources <ul style="list-style-type: none"> • Having tablets or kiosks at the practice level may facilitate uptake Structured engagement process (buy-in) <ul style="list-style-type: none"> • Identification of common values and concerns (liability, time or personnel management) • Frequent sharing of implementation information • IT support |
| | Not collecting data that could require timely reaction, or creating processes to address concerning responses | |
| | <ul style="list-style-type: none"> • IT support to set up a process that seamlessly integrates the tool into the EHR | |

Abbreviations: EHR, electronic health record, IT, information technology; SDH, social determinants of health.