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ORIGINAL RESEARCH

Evidence Synthesis Activities of a Hospital Evidence-Based Practice Center and Impact on Hospital Decision Making

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BACKGROUND: Hospital evidence-based practice centers (EPCs) synthesize and disseminate evidence locally, but their impact on institutional decision making is unclear.

OBJECTIVE: To assess the evidence synthesis activities and impact of a hospital EPC serving a large academic healthcare system.

DESIGN, SETTING, AND PARTICIPANTS: Descriptive analysis of the EPC's database of rapid systematic reviews since EPC inception (July 2006–June 2014), and survey of report requestors from the EPC's last 4 fiscal years.

MEASUREMENTS: Descriptive analyses examined requestor and report characteristics; questionnaire examined report usability, impact, and requestor satisfaction (higher scores on 5-point Likert scales reflected greater agreement).

RESULTS: The EPC completed 249 evidence reviews since inception. The most common requestors were clinical departments (29%, n = 72), chief medical officers (19%, n = 47), and purchasing committees (14%, n = 35). The most common technologies reviewed were drugs (24%, n = 60), devices (19%, n = 48), and care processes (12%, n = 31). Mean report completion time was 70 days. Thirty reports (12%) informed computerized decision support interventions. More than half of reports (56%, n = 139) were completed in the last 4 fiscal years for 65 requestors. Of the 64 eligible participants, 46 responded (72%). Requestors were satisfied with the report (mean = 4.4), and agreed it was delivered promptly (mean = 4.4), answered the questions posed (mean = 4.3), and informed their final decision (mean = 4.1).

CONCLUSIONS: This is the first examination of evidence synthesis activities by a hospital EPC in the United States. Our findings suggest hospital EPCs can efficiently synthesize and disseminate evidence addressing a range of clinical topics for diverse stakeholders, and can influence local decision making. *Journal of Hospital Medicine* 2016;11:185–192. © 2015 Society of Hospital Medicine

Hospital evidence-based practice centers (EPCs) are "structures" with the potential to facilitate the integration of evidence into institutional decision making to close "knowing-doing" gaps[1–6]; in the process, they can support the evolution of their parent institutions into "learning healthcare systems."[7] The potential of hospital EPCs stems from their ability to identify and adapt national evidence-based guidelines and systematic reviews for the local setting,[8] create local evidence-based guidelines in the absence of national guidelines, use local data to help define problems and assess the impact of solutions,[9] and implement evidence into practice through computerized clinical decision support (CDS) interventions and other quality-improvement (QI) initiatives.[9,10] As such, hospital EPCs have the potential to strengthen relationships and understanding between clinicians and administrators[11]; foster a culture of evidence-based practice; and improve the quality, safety, and value of care provided.[10]

Formal hospital EPCs remain uncommon in the United States,[10–12] though their numbers have expanded worldwide.[13,14] This growth is due not to any reduced role for national EPCs, such as the National Institute for Health and Clinical Excellence[15] in the United Kingdom, or the 13 EPCs funded by the Agency for Healthcare Research and Quality (AHRQ)[16,17] in the United States. Rather, this growth is fueled by the heightened awareness that the value of healthcare interventions often needs to be assessed locally, and that clinical guidelines that consider local context have a greater potential to improve quality and efficiency.[9,18,19]

Despite the increasing number of hospital EPCs globally, their impact on administrative and clinical decision making has rarely been examined,[13,20] especially for hospital EPCs in the United States. The few studies that have assessed the impact of hospital EPCs on institutional decision making have done so in the context of technology acquisition, neglecting the role

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hospital EPCs may play in the integration of evidence into clinical practice. For example, the Technology Assessment Unit at McGill University Health Center found that of the 27 reviews commissioned in their first 5 years, 25 were implemented, with 6 (24%) recommending investments in new technologies and 19 (76%) recommending rejection, for a reported net hospital savings of $10 million.[21] Understanding the activities and impact of hospital EPCs is particularly critical for hospitalist leaders, who could leverage hospital EPCs to inform efforts to support the quality, safety, and value of care provided, or who may choose to establish or lead such infrastructure. The availability of such opportunities could also support hospitalist recruitment and retention.

In 2006, the University of Pennsylvania Health System (UPHS) created the Center for Evidence-based Practice (CEP) to support the integration of evidence into practice to strengthen quality, safety, and value.[10] Cofounded by hospitalists with formal training in clinical epidemiology, the CEP performs rapid systematic reviews of the scientific literature to inform local practice and policy. In this article, we describe the first 8 years of the CEP's evidence synthesis activities and examine its impact on decision making across the health system.

METHODS

Setting

The UPHS includes 3 acute care hospitals, and inpatient facilities specializing in acute rehabilitation, skilled nursing, long-term acute care, and hospice, with a capacity of more than 1800 beds and 75,000 annual admissions, as well as primary care and specialty clinics with more than 2 million annual outpatient visits. The CEP is funded by and organized within the Office of the UPHS Chief Medical Officer, serves all UPHS facilities, has an annual budget of approximately $1 million, and is currently staffed by a hospitalist director, 3 research analysts, 6 physician and nurse liaisons, a health economist, biostatistician, administrator, and librarians, totaling 5.5 full time equivalents.

The mission of the CEP is to support the quality, safety, and value of care at Penn through evidence-based practice. To accomplish this mission, the CEP performs rapid systematic reviews, translates evidence into practice through the use of CDS interventions and clinical pathways, and offers education in evidence-based decision making to trainees, staff, and faculty. This study is focused on the CEP's evidence synthesis activities.

Typically, clinical and administrative leaders submit a request to the CEP for an evidence review, the request is discussed and approved at the weekly staff meeting, and a research analyst and clinical liaison are assigned to the request and communicate with the requestor to clearly define the question of interest. Subsequently, the research analyst completes a protocol, a draft search, and a draft report, each reviewed and approved by the clinical liaison and requestor. The final report is posted to the website, disseminated to all key stakeholders across the UPHS as identified by the clinical liaisons, and integrated into decision making through various routes, including in-person presentations to decision makers, and CDS and QI initiatives.

Study Design

The study included an analysis of an internal database of evidence reviews and a survey of report requestors, and was exempted from institutional review board review. Survey respondents were informed that their responses would be confidential and did not receive incentives.

Internal Database of Reports

Data from the CEP's internal management database were analyzed for its first 8 fiscal years (July 2006–June 2014). Variables included requestor characteristics, report characteristics (eg, technology reviewed, clinical specialty examined, completion time, and performance of meta-analyses and GRADE [Grading of Recommendations Assessment, Development and Evaluation] analyses[22]), report use (eg, integration of report into CDS interventions) and dissemination beyond the UPHS (eg, submission to Center for Reviews and Dissemination [CRD] Health Technology Assessment [HTA] database[23] and to peer-reviewed journals). Report completion time was defined as the time between the date work began on the report and the date the final report was sent to the requestor. The technology categorization scheme was adapted from that provided by Goodman (2004)[24] and the UK National Institute for Health Research HTA Programme.[25] We systematically assigned the technology reviewed in each report to 1 of 8 mutually exclusive categories. The clinical specialty examined in each report was determined using an algorithm (see Supporting Information, Appendix 1, in the online version of this article).

We compared the report completion times and the proportions of requestor types, technologies reviewed, and clinical specialties examined in the CEP's first 4 fiscal years (July 2006–June 2010) to those in the CEP's second 4 fiscal years (July 2010–June 2014) using t tests and χ^2 tests for continuous and categorical variables, respectively.

Survey

We conducted a Web-based survey (see Supporting Information, Appendix 2, in the online version of this article) of all requestors of the 139 rapid reviews completed in the last 4 fiscal years. Participants who requested multiple reports were surveyed only about the most recent report. Requestors were invited to participate in the survey via e-mail, and follow-up e-mails were sent to nonrespondents at 7, 14, and 16 days. Nonrespondents and respondents were compared with respect to requestor type (physician vs

TABLE 1. Technology Categories, Definitions, Examples, and Frequencies by Fiscal Years

Category	Definition	Examples	Total	2007–2010	2011–2014	*P* Value
Total			249 (100%)	109 (100%)	140 (100%)	
Drug	A report primarily examining the efficacy/effectiveness, safety, appropriate use, or cost of a pharmacologic agent	Celecoxib for pain in joint arthroplasty; colchicine for prevention of pericarditis and atrial fibrillation	60 (24%)	35 (32%)	25 (18%)	0.009
Device, equipment, and supplies	A report primarily examining the efficacy/effectiveness, safety, appropriate use, or cost of an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory that is intended for use in the prevention, diagnosis, or treatment of disease and does not achieve its primary intended purposes though chemical action or metabolism[50]	Thermometers for pediatric use; femoral closure devices for cardiac catheterization	48 (19%)	25 (23%)	23 (16%)	0.19
Process of care	A report primarily examining a clinical pathway or a clinical practice guideline that significantly involves elements of prevention, diagnosis, and/or treatment or significantly incorporates 2 or more of the other technology categories	Preventing patient falls; prevention and management of delirium	31 (12%)	18 (17%)	13 (9%)	0.09
Test, scale, or risk factor	A report primarily examining the efficacy/effectiveness, safety, appropriate use, or cost of a test intended to screen for, diagnose, classify, or monitor the progression of a disease	Computed tomography for acute chest pain; urine drug screening in chronic pain patients on opioid therapy	31 (12%)	8 (7%)	23 (16%)	0.03
Medical/surgical procedure	A report primarily examining the efficacy/effectiveness, safety, appropriate use, or cost of a medical intervention that is not a drug, device, or test or of the application or removal of a device	Biliary drainage for chemotherapy patients; cognitive behavioral therapy for insomnia	26 (10%)	8 (7%)	18 (13%)	0.16
Policy or organizational/managerial system	A report primarily examining laws or regulations; the organization, financing, or delivery of care, including settings of care; or healthcare providers	Medical care costs and productivity changes associated with smoking; physician training and credentialing for robotic surgery in obstetrics and gynecology	26 (10%)	4 (4%)	22 (16%)	0.002
Support system	A report primarily examining the efficacy/effectiveness, safety, appropriate use, or cost of an intervention designed to provide a new or improved service to patients or healthcare providers that does not fall into 1 of the other categories	Reconciliation of data from differing electronic medical records; social media, text messaging, and postdischarge communication	14 (6%)	3 (3%)	11 (8%)	0.09
Biologic	A report primarily examining the efficacy/effectiveness, safety, appropriate use, or cost of a product manufactured in a living system	Recombinant factor VIIa for cardiovascular surgery; osteobiologics for orthopedic fusions	13 (5%)	8 (7%)	5 (4%)	0.19

nonphysician) and topic evaluated (traditional HTA topics such as drugs, biologics, and devices vs nontraditional HTA topics such as processes of care). The survey was administered using REDCap[26] electronic data capture tools. The 44-item questionnaire collected data on the interaction between the requestor and the CEP, report characteristics, report impact, and requestor satisfaction.

Survey results were imported into Microsoft Excel (Microsoft Corp, Redmond, WA) and SPSS (IBM, Armonk, NY) for analysis. Descriptive statistics were generated, and statistical comparisons were conducted using χ^2 and Fisher exact tests.

RESULTS

Evidence Synthesis Activity

The CEP has produced several different report products since its inception. Evidence reviews (57%, n = 142) consist of a systematic review and analysis of the primary literature. Evidence advisories (32%, n = 79) are summaries of evidence from secondary sources such as guidelines or systematic reviews. Evidence inventories (3%, n = 7) are literature searches that describe the quantity and focus of available evidence, without analysis or synthesis.[27]

The categories of technologies examined, including their definitions and examples, are provided in Table 1. Drugs (24%, n = 60) and devices/equipment/supplies (19%, n = 48) were most commonly examined. The proportion of reports examining technology types traditionally evaluated by HTA organizations significantly decreased when comparing the first 4 years of CEP activity to the second 4 years (62% vs 38%, $P < 0.01$), whereas reports examining less traditionally reviewed categories increased (38% vs 62%, $P < 0.01$). The most common clinical specialties represented by the CEP reports were nursing (11%, n = 28), general surgery (11%, n = 28), critical care (10%, n = 24), and general medicine (9%, n = 22) (see Supporting Information, Appendix 3, in the online version of this article). Clinical departments were the most common requestors (29%, n = 72) (Table 2). The proportion of requests from clinical departments significantly increased when comparing the first 4 years to the second 4 years (20% vs 36%, $P < 0.01$), with requests from purchasing committees significantly decreasing (25% vs 6%, $P < 0.01$). The overall report completion time was 70 days, and significantly decreased when comparing the first 4 years to the second 4 years (89 days vs 50 days, $P < 0.01$).

Thirty-seven (15%) reports included meta-analyses conducted by CEP staff. Seventy-five reports (30%)

TABLE 2. Requestor Categories and Frequencies by Fiscal Years

Category	Total	2007–2010	2011–2014	*P* Value
Total	249 (100%)	109 (100%)	140 (100%)	
Clinical department	72 (29%)	22 (20%)	50 (36%)	0.007
CMO	47 (19%)	21 (19%)	26 (19%)	0.92
Purchasing committee	35 (14%)	27 (25%)	8 (6%)	<0.001
Formulary committee	22 (9%)	12 (11%)	10 (7%)	0.54
Quality committee	21 (8%)	11 (10%)	10 (7%)	0.42
Administrative department	19 (8%)	5 (5%)	14 (10%)	0.11
Nursing	14 (6%)	4 (4%)	10 (7%)	0.23
Other*	19 (8%)	7 (6%)	12 (9%)	0.55

NOTE: *Other includes ad hoc committees, CEP, Children's Hospital of Philadelphia, IT committees, payers, and the primary care network.. **Abbreviations:** CEP, Center for Evidence-based Practice; CMO, chief medical officer; IT, information technology.

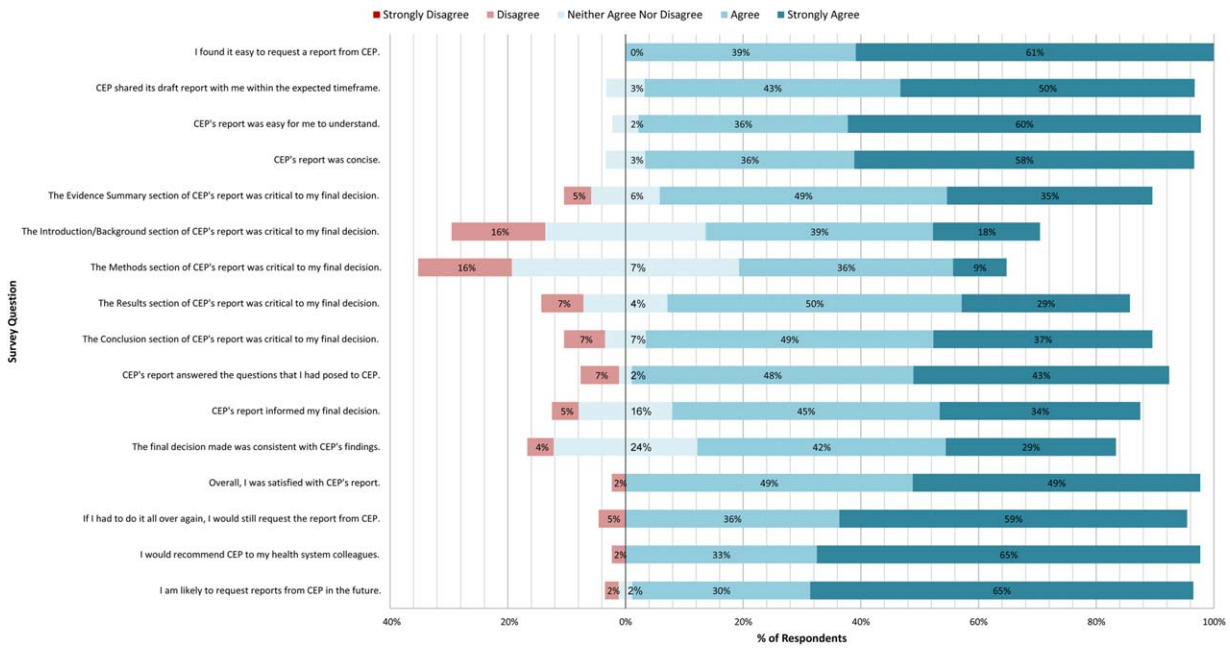

FIG. 1. Requestor responses to Likert survey questions. Abbreviations: CEP, Center for Evidence-based Practice.

contained an evaluation of the quality of the evidence base using GRADE analyses.[22] Of these reports, the highest GRADE of evidence available for any comparison of interest was moderate (35%, n = 26) or high (33%, n = 25) in most cases, followed by very low (19%, n = 14) and low (13%, n = 10).

Reports were disseminated in a variety of ways beyond direct dissemination and presentation to requestors and posting on the center website. Thirty reports (12%) informed CDS interventions, 24 (10%) resulted in peer-reviewed publications, and 204 (82%) were posted to the CRD HTA database.

Evidence Synthesis Impact

A total of 139 reports were completed between July 2010 and June 2014 for 65 individual requestors. Email invitations to participate in the survey were sent to the 64 requestors employed by the UPHS. The response rate was 72% (46/64). The proportions of physician requestors and traditional HTA topics evaluated were similar across respondents and nonrespondents (43% [20/46] vs 39% [7/18], $P = 0.74$; and 37% [17/46] vs 44% [8/18], $P = 0.58$, respectively). Aggregated survey responses are presented for items using a Likert scale in Figure 1, and for items using a yes/no or ordinal scale in Table 3.

In general, respondents found reports easy to request, easy to use, timely, and relevant, resulting in high requestor satisfaction. In addition, 98% described the scope of content and level of detail as "about right." Report impact was rated highly as well, with the "evidence summary" and "conclusions" rated as the most critical to decision making. A majority of respondents indicated that reports confirmed their tentative decision (77%, n = 34), whereas some changed their tentative decision (7%, n = 3), and others suggested the report had no effect on their tentative decision (16%, n = 7). Respondents indicated the amount of time that elapsed between receiving reports and making final decisions was 1 to 7 days (5%, n = 2), 8 to 30 days (40%, n = 17), 1 to 3 months (37%, n = 16), 4 to 6 months (9%, n = 4), or greater than 6 months (9%, n = 4). The most common reasons cited for requesting a report were the CEP's evidence synthesis skills and objectivity.

TABLE 3. Responses to Yes/No and Ranking Survey Questions

Items	% of Respondents Responding Affirmatively
Requestor activity	
What factors prompted you to request a report from CEP? (Please select all that apply.)	
My own time constraints	28% (13/46)
CEP's ability to identify and synthesize evidence	89% (41/46)
CEP's objectivity	52% (24/46)
Recommendation from colleague	30% (14/46)
Did you conduct any of your own literature searches before contacting CEP?	67% (31/46)
Did you obtain and read any of the articles cited in CEP's report?	63% (29/46)
Did you read the following sections of CEP's report?	
Evidence summary (at beginning of report)	100% (45/45)
Introduction/background	93% (42/45)
Methods	84% (38/45)
Results	98% (43/43)
Conclusion	100% (43/43)
Report dissemination	
Did you share CEP's report with anyone NOT involved in requesting the report or in making the final decision?	67% (30/45)
Did you share CEP's report with anyone outside of Penn?	7% (3/45)
Requestor preferences	
Would it be helpful for CEP staff to call you after you receive any future CEP reports to answer any questions you might have?	55% (24/44)
Following any future reports you request from CEP, would you be willing to complete a brief questionnaire?	100% (44/44)

	Percentage of Respondents Ranking as First Choice*
Please rank how you would prefer to receive reports from CEP in the future.	
E-mail containing the report as a PDF attachment	77% (34/44)
E-mail containing a link to the report on CEP's website	16% (7/44)
In-person presentation by the CEP analyst writing the report	18% (8/44)
In-person presentation by the CEP director involved in the report	16% (7/44)

NOTE: **Abbreviations:** CEP, Center for Evidence-based Practice. *The sum of these percentages is greater than 100 percent because respondents could rank multiple options first.

DISCUSSION

To our knowledge, this is the first comprehensive description and assessment of evidence synthesis activity by a hospital EPC in the United States. Our findings suggest that clinical and administrative leaders will request reports from a hospital EPC, and that hospital EPCs can promptly produce reports when requested. Moreover, these syntheses can address a wide range of clinical and policy topics, and can be disseminated through a variety of routes. Lastly, requestors are satisfied by these syntheses, and report that they inform decision making. These results suggest that EPCs may be an effective infrastructure paradigm for promoting evidence-based decision making within healthcare provider organizations, and are consistent with previous analyses of hospital-based EPCs.[21,28,29]

Over half of report requestors cited CEP's objectivity as a factor in their decision to request a report, underscoring the value of a neutral entity in an environment where clinical departments and hospital committees may have competing interests.[10] This asset was 1 of the primary drivers for establishing our hospital EPC. Concerns by clinical executives about the influence of industry and local politics on institutional decision making, and a desire to have clinical evidence more systematically and objectively integrated into decision making, fueled our center's funding.

The survey results also demonstrate that respondents were satisfied with the reports for many reasons, including readability, concision, timeliness, scope, and content, consistent with the evaluation of the French hospital-based EPC CEDIT (French Committee for the Assessment and Dissemination of Technological Innovations).[29] Given the importance of readability, concision, and relevance that has been previously described,[16,28,30] nearly all CEP reports contain an "evidence summary" on the first page that highlights key findings in a concise, user-friendly format.[31] The evidence summaries include bullet points that: (1) reference the most pertinent guideline recommendations along with their strength of recommendation and underlying quality of evidence; (2) organize and summarize study findings using the most critical clinical outcomes, including an assessment of the quality of the underlying evidence for each outcome; and (3) note important limitations of the findings.

Evidence syntheses must be timely to allow decision makers to act on the findings.[28,32] The primary criticism of CEDIT was the lag between requests and report publication.[29] Rapid reviews, designed to inform urgent decisions, can overcome this challenge.[31,33,34] CEP reviews required approximately 2 months to complete on average, consistent with the most rapid timelines reported,[31,33,34] and much shorter than standard systematic review timelines, which can take up to 12 to 24 months.[33] Working with requestors to limit the scope of reviews to those issues most critical to a decision, using secondary resources when available, and hiring experienced research analysts help achieve these efficiencies.

The study by Bodeau-Livinec also argues for the importance of report accessibility to ensure dissemination.[29] This is consistent with the CEP's approach, where all reports are posted on the UPHS internal website. Many also inform QI initiatives, as well as CDS interventions that address topics of general interest to acute care hospitals, such as venous thromboembolism (VTE) prophylaxis,[35] blood product transfusions,[36] sepsis care,[37,38] and prevention of catheter-associated urinary tract infections (CAUTI)[39] and hospital readmissions.[40] Most reports are also listed in an international database of rapid reviews,[23] and reports that address topics of general interest, have sufficient evidence to synthesize, and have no prior published systematic reviews are published in the peer-reviewed literature.[41,42]

The majority of reports completed by the CEP were "evidence reviews," or systematic reviews of primary literature, suggesting that CEP reports often address questions previously unanswered by existing published systematic reviews; however, about a third of reports were "evidence advisories," or summaries of evidence from preexisting secondary sources. The relative scarcity of high-quality evidence bases in those reports where GRADE analyses were conducted might be expected, as requestors may be more likely to seek guidance when the evidence base on a topic is lacking. This was further supported by the small percentage (15%) of reports where adequate data of sufficient homogeneity existed to allow meta-analyses. The small number of original meta-analyses performed also reflects our reliance on secondary resources when available.

Only 7% of respondents reported that tentative decisions were "changed" based on their report. This is not surprising, as evidence reviews infrequently result in clear "go" or "no go" recommendations. More commonly, they address or inform complex clinical questions or pathways. In this context, the "change/confirm/no effect" framework may not completely reflect respondents' use of or benefit from reports. Thus, we included a diverse set of questions in our survey to best estimate the value of our reports. For example, when asked whether the report answered the question posed, informed their final decision, or was consistent with their final decision, 91%, 79%, and 71% "agreed" or "strongly agreed," respectively. When asked whether they would request a report again if they had to do it all over, recommend CEP to their colleagues, and be likely to request reports in the future, at least 95% of survey respondents "agreed" or "strongly agreed." In addition, no respondent indicated that their report was not timely enough to influence their decision. Moreover, only a minority of respondents expressed disappointment that the CEP's report did not provide actionable recommendations due to a lack of published evidence (9%, n = 4). Importantly, the large proportion of requestors indicating that reports confirmed their tentative decisions may be a reflection of "hindsight bias."

The most apparent trend in the production of CEP reviews over time is the relative increase in requests by clinical departments, suggesting that the CEP is being increasingly consulted to help define best clinical practices. This is also supported by the relative increase in reports focused on policy or organizational/managerial systems. These findings suggest that hospital EPCs have value beyond the traditional realm of HTA.

This study has a number of limitations. First, not all of the eligible report requestors responded to our survey. Despite this, our response rate of 72% compares favorably with surveys published in medical journals.[43] In addition, nonresponse bias may be less important in physician surveys than surveys of the general population.[44] The similarity in requestor and report characteristics for respondents and nonrespondents supports this. Second, our survey of impact is self-reported rather than an evaluation of actual decision making or patient outcomes. Thus, the survey relies on the accuracy of the responses. Third, recall bias must be considered, as some respondents were asked to evaluate reports that were greater than 1 year old. To reduce this bias, we asked respondents to consider the most recent report they requested,

included that report as an attachment in the survey request, and only surveyed requestors from the most recent 4 of the CEP's 8 fiscal years. Fourth, social desirability bias could have also affected the survey responses, though it was likely minimized by the promise of confidentiality. Fifth, an examination of the impact of the CEP on costs was outside the scope of this evaluation; however, such information may be important to those assessing the sustainability or return on investment of such centers. Simple approaches we have previously used to approximate the value of our activities include: (1) estimating hospital cost savings resulting from decisions supported by our reports, such as the use of technologies like chlorhexidine for surgical site infections[45] or discontinuation of technologies like aprotinin for cardiac surgery[46]; and (2) estimating penalties avoided or rewards attained as a result of center-led initiatives, such as those to increase VTE prophylaxis,[35] reduce CAUTI rates,[39] and reduce preventable mortality associated with sepsis.[37,38] Similarly, given the focus of this study on the local evidence synthesis activities of our center, our examination did not include a detailed description of our CDS activities, or teaching activities, including our multidisciplinary workshops for physicians and nurses in evidence-based QI[47] and our novel evidence-based practice curriculum for medical students. Our study also did not include a description of our extramural activities, such as those supported by our contract with AHRQ as 1 of their 13 EPCs.[16,17,48,49] A consideration of all of these activities enables a greater appreciation for the potential of such centers. Lastly, we examined a single EPC, which may not be representative of the diversity of hospitals and hospital staff across the United States. However, our EPC serves a diverse array of patient populations, clinical services, and service models throughout our multientity academic healthcare system, which may improve the generalizability of our experience to other settings.

As next steps, we recommend evaluation of other existing hospital EPCs nationally. Such studies could help hospitals and health systems ascertain which of their internal decisions might benefit from locally sourced rapid systematic reviews and determine whether an in-house EPC could improve the value of care delivered.

In conclusion, our findings suggest that hospital EPCs within academic healthcare systems can efficiently synthesize and disseminate evidence for a variety of stakeholders. Moreover, these syntheses impact decision making in a variety of hospital contexts and clinical specialties. Hospitals and hospitalist leaders seeking to improve the implementation of evidence-based practice at a systems level might consider establishing such infrastructure locally.

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