

Questions or Additional Information Needed

Productivity Loss

Productivity loss is not quantified or adequately addressed. HowardCenter, to some extent, will be changing virtually all clinical processes for virtually all physician, nursing, clinician, and managerial staff. How is the impact of lost productivity due to changed processes accounted for in your proposed project? Most institutions figure EHR implementation results in 60-80% changed procedures. In your application, Business Interruption does not appear to address these costs, so we need to understand whether and how these costs have been quantified and how they will be covered.

Response: *While changes to staff productivity are complex to project when new processes are yet to be fully defined, several observations from site visits to Western Psychiatric Institute and Clinics (WPIC uses PsychConsult in a production setting) enforce the argument that there are productivity gains from automating clinical processes. Namely, we observed that care planning and progress noting took less time for the clinician to complete because of less redundancy in transcribing demographic data and referencing paper charts. Supervision of the clinical process was more effective as it focused more on content than on tracking down paperwork. Time spent on payer authorizations was less, as was appointment scheduling. Thus once implemented, changed processes should result in both greater efficiencies as well as improved clinical care. The issue of productivity loss during implementation will be addressed by the agency phasing programs to come online one, two or three at a time (depending on size, complexity and experience of the parties involved), and through involvement of program supervisors in the staff training and implementation process.*

Accounting for Resources and Costs Associated with Implementation Tasks

How are implementation tasks such as project management and the implementation team accounted for both in terms of resource counts and budgeting? There are some required dedicated positions for project management, change management, and training that are not identified. These needs must be fulfilled a) by existing staff (assuming people with the required skills already are on staff, which means those positions would have to be backfilled), b) from new staff (not budgeted), or c) by contractors (not shown as a line item). Likewise, a number of key staff from all affected business units will be heavily involved throughout implementation in working on changing business processes, reviewing new forms, integrating the technology into daily workflow, documentation, training, etc. We do not see that these costs have been accounted for (Business Interruption covers “training release time and minor billing transaction remediation” only).

Response: *Project management, business process analysis, and training are absolutely part of the planned project. HowardCenter has structured resources on multiple levels: 1) EHR project team of 12 individuals (both clinical and administrative managers), 2) a Clinical Informatics Coordinator “CIC” (part time), IT resources (Director, IT Auditor, Clinical Systems Analyst, Business Systems Analyst, Database Programmer, and Training Specialist – all committed 60% to the EHR implementation), and contracted project management time from Askesis Development Group. Project management specifically is the charge of the IT Director, the CIC, and ADG account manager, supplemented by the IT Auditor, Director of Finance, and reportable to the EHR Project team. Business process analysis is specifically identified in the project plan, to be conducted by respective administrative managers in those areas, and by the CIC with clinical supervisors in*

clinical areas. All business process documentation will be reviewed by a Business Process workgroup of the EHR Project Team, with issues of conflict as well as potential efficiencies referred to the Team itself before senior management. Training will be similarly structured, with the addition of the IT Training specialist as resource for training material / content development. Actual training time requirements are still a matter of concern by the EHR Project Team; hopes are to utilize Human Resources staff that conducts orientation as potential supplemental time.

Reference C, Question C3:

Question C3: Were the costs participating in a health information exchange (e.g., any subsequent interface development and maintenance) considered as part of this COA, and if not, how will they be addressed?

No, connectivity costs are not part of our project to automate clinical documents for the purpose of producing an EHR. Participating in an EHIN would be considered operating costs and will be addressed in the normal budgeting cycle process.

We would like an estimate of these costs.

Response: *Based on the political and funding direction of the State of Vermont assigning the role of it's EHIN to VITL, HowardCenter has met with VITL and with both ADG and VITL together. Those meetings have identified both the evolving nature of the full technical mechanisms to be used as well as the likely use of HL7 interfacing. ADG has such interfaces in use now (specifically to support the integration of the pharmacy application TouchScripts such as in use at WPIC), and has stated that further interfaces are expected to be developed. HowardCenter also has experience with interfacing with Microsoft's BizTalk interfacing tool. VITL has stated their interest in BizTalk as well. Given that EHIN development is not likely in the next year, HowardCenter will stay abreast of standards, tools, and requirements. When appropriate for development, we anticipate a shared project between VITL, ADG, and our own resources that will cost HowardCenter no more than \$15,000. As HowardCenter has a yearly IT budget of almost \$2M, EHIN development costs will be operationalized.*

Reference F

Reference F: *Certainly, this will improve the service needs of the population we serve over time through the use of higher quality documentation; built in protocols and reminders; improved medication management; more efficient chart management and the use of clinical tools not available with paper based systems.*

Question F1: How will medication management be improved?

Improvements are expected in two categories – using TouchScripts features for e-prescribing, decision support, patient adherence, etc.; and by referencing TouchScripts data within PsychConsult clinical documents (notes, summaries, etc.)

We are curious that there was no mention of this module or part of the project in the COA Application? Our VSH experience is that medication management is a significant implementation in itself in terms of cultural change (affects MDs, RNs, clinicians and all medication-related processes).

We were surprised this part was not quantified or even addressed in the original COA application, and we would like to understand how this.

Response: *The original COA did not specifically reference medication management (except in the cost detail itemization for TouchScripts) as this is but one aspect of a full array of clinical processes that will be affected by automation. The cultural change you reference will apply to conducting assessments, care planning, progress noting, care review, and other clinical thought processes just as it will to medication management. They are all significant implementations.*

Reference H, Question H2

Question H2: What are the anticipated or estimated impacts of staff redeployment resulting from the EHR? Specifically, please discuss how the increased Information Technology demands for training, change management, database management, help desk, application support, desktop support, report writing, and system administration have been evaluated and accounted for in the ongoing operational costs of the system.

Projecting redeployment as a result of the transition to an EHR from a paper based system is elusive at best. We anticipate increased operating costs in IT due to the need for around the clock support for the EHR in the way of help desk and field service. In addition, we realize that there will be efficiencies gained in Health information and Data Entry that will offset the increase in IT costs. Admission, transfer and discharge functionality will impact administrative support staff throughout the agency and their roles may change more dramatically. All redeployment costs will be evaluated during implementation and adjustments to our operating budget will be occurring as a result. Specific IT skill sets as identified in the question (training, change management, database management, help desk, application support, desktop support, report writing, and system administration) already exist in the IT Department of HowardCenter in the form of ten individuals (excluding Data Entry) with varied roles, skills, and responsibilities. These resources have been engaged over the course of the last ten years with EHR implementation on the strategic horizon.

We question if these skill sets all exist in current staffing. In particular, project management, business analysis, and change management are not commonly found in conjunction with “typical” IT skill sets for resources such as database administrators, system developers, network administrators, etc. It may be that the vender (ADG) is providing these services as part of the Implementation Services, but there is still a critical need for internal staff (that’s an important distinction) dedicated to these tasks as well. In addition, it does not appear these costs have been quantified. Please explain your plan for project management, business analysis and change management as described above and quantify the costs associated with these functions.

Response: *Please see second response on the first page of this document. In addition, recent automation of HowardCenter’s timesheet process has freed resources in our Data Entry group to be redeployed in the Help Desk area. While this will take a few months to materialize, that time will supplement the existing Help Desk (1 person), field service (2 persons) and Network Engineer (1 person).*

General Question 2

General Question 2: Please provide a detailed breakdown of project costs included in Table 1, including:

- hardware and associated infrastructure;
- implementation services breakdown;
- scanning costs, types, and number of documents to be scanned;
- what disconnected database costs entail;
- business interruption contingency detail;
- staffing costs for project management, user training, technical training, and ongoing system administration, database administration, programming, report writing, user support, and change management.

Please see Project Cost Detail Worksheet attached.

Staffing costs for project management and change management are not included in this response. Tables 3A and 3C included with the original COA show salaries for 2009-2011 the same in 3A (Without Project) and 3C (With Project). Does this mean no additional staff are expected to be hired for the project? Also, business continuity expenses detail is not provided, presumably because it was calculated as a percent. Is this amount intended to reflect increased staffing as well as any disruptions to billing and all lost time for staff engaged on the project team, in training, and lost productivity? Please address.

Response: *HowardCenter purchased PsychConsult in 1997, and has spent the last 11 years developing the infrastructure, environment, and IT department to use PsychConsult as a clinical EHR. Non-profit funding and administrative budget caps have slowed and frustrated this development to some extent, hence the need to approach EHR development as a capital project. Yet the skill set of IT department staff has been focused toward eventual implementation of a clinical EHR.*

General Question 11

Question 11: Please discuss the training you will employ for clinical staff to use this system efficiently. Please quantify the learning curve for clinical staff and describe any challenges you may encounter.

The basic training model is to provide 4 to 5 half-day sessions per staff for them to learn the new processes. Supervisors (who are expected to perform some training and post live support) would receive 4-5 full day sessions. Delivery of training is to be by program, sequentially implementing in smaller groups, with training split 2/3 up front and 1/3 after live. Both supervisors and IT training staff will provide hand-on training and post-live support.

We expect challenges related to staff adoption of new procedures, using the computer, and change in general. To address this, HowardCenter plans to include into its clinical document design process and its user scripting process those individuals that exert both formal and informal leadership within the organization. Further, through sequential implementation, more resistant or entrenched groups can be staged for later while all groups can get more specific attention.

This does not address the need for ongoing training. With the amount of turnover at HC, there will be ongoing permanent training for new/redeployed staff. The strategy of using formal and informal leaders as critical contributors is good, but implies significant impact on business continuity as it means that key personnel will be dedicating large amounts of time to the project over a year or more. Is that time reflected in the Business Interruption number, and, if so, how?

Response: Please see second response on the first page of this document. In addition, some discussion about the philosophy of training on clinical systems is warranted. Certainly, in administrative areas training on procedures for billing, scheduling, registration, authorizations, and such are more traditional computer-based user process training topics, approached by documenting and reviewing those processes and then demonstrating and rehearsing done typically with computer trainers in a classroom setting. Yet this is not the desired model for clinical system training.

The lines between computer training, supervision, quality assurance, and compliance must blur for these systems to reach full potential. Supervisors train their clinicians now – on the use of paper forms, on the preferred or required content therein, on how to obtain required information and navigate the organization that processes that information. Supervisors will continue to train on these same issues, but in the context of the EHR system. It is important to acknowledge that basic computer literacy has not been a hallmark of social service organizations, and the topics of keyboarding, Windows use, remote connectivity and such will take on more importance and stress IT training and support resources. To this end HowardCenter has hired its IT Trainer and is expanding its Help Desk. Further, HowardCenter has sent staff to KnowledgeWave and Panurgy for local external training sessions for the last five or six years and are likely to continue.

Once past basic literacy, clinicians will need to understand how the full range of the clinical processes are represented in the EHR system, and their primary resource will continue to be their supervisor. Supervisors will certainly need support, and through the EHR implementation project they will receive this from the CIC, the EHR Project Team, the ADG Account Manager, and IT staff (IT Auditor, Clinical Systems Analyst). After implementation, maintenance of system use skills and the training of new staff is expected to be a shared responsibility between the IT Trainer and the respective supervisor.