The Ongoing Journey of Data Visualization in Ascension

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[1]In 2021 I was privileged to join Drs. Trancik and Ostertag to write on the first data visualization elements coming from our use of Tableau and REDCap as part of the third annual Catholic Healthcare Innovation in Ethics Forum.[2] We mentioned in that article how the visualization of our data helped to "tell our story" in ways we had not been able to in the past. As that journey continues, it is the goal of this piece to share more of that story.

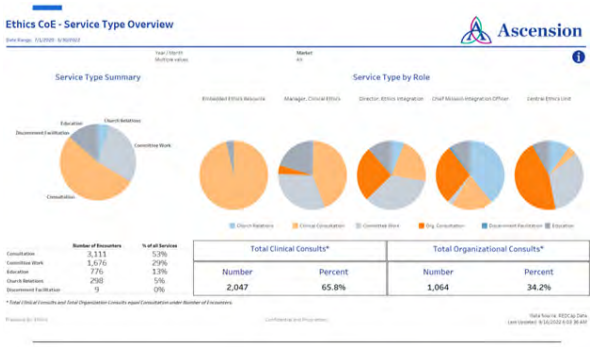
A development on the data entry side, is the capturing of data that reflects our appreciation for the fact that the work we do has just as much to do with whom we collaborate with to deliver ethics resources as it does our own professional practice. As such, we have been able to construct access to our database to take advantage of the work of our Chief Mission Integration Officers (CMIOs) relative to proactive ethics integration (PEI). Ascension ethicists and CMIOs have gathered data in a standardized and systematic way through the Ethics Integration Database (EID) for over two consecutive years. The data in Table One, for example, utilizes data visualization to illustrate the volume levels of different types of services provided through the Ethics Centers of Expertise (CoEs) and the CMIOs. Capturing this more comprehensive set of data helps inform how we understand the work of ethics across multiple service types and roles.

SERVICE TYPES OVERVIEW

The pie chart in the upper, left-hand corner of Table One conveys the volume of ethics activities by the service types. This pie chart shows the proportion of activity in each service type in relation to the whole of all services. As in years past, consultation represents just over half (53%) of all service activities. (It is important to note "consultation" here includes both clinical and organizational as those terms are understood within Ascension). The table below the large pie chart quantifies those proportions. These data are not reflective of the time commitment required, or time spent, providing these services. These numbers and percentages are better understood as representing "demand" rather than time. It is also important to clarify that the services listed here are not to be viewed as comprising all domains of our work. The five listed -- consultation, committee work, education, church relations, and discernment facilitation -- comprise those services which the organization understands as that which the Ethics CoEs commit to delivering across the system. The smaller pie charts on the right side illustrate the proportion of those services performed by the different roles within the ethics structures along with the CMIOs. These smaller pie charts provide a quantitative picture that confirms that each of the individual roles within the structure are functioning as they have been designed across the Clinical Ethics CoE and

the Organizational and Church Relations CoE. The number and division of consults between the clinical and organizational consult service types is as expected and consistent with the data of previous years within Ascension (i.e., 65.8% and 34.2% of service type "consultation," respectively).

TABLE ONE

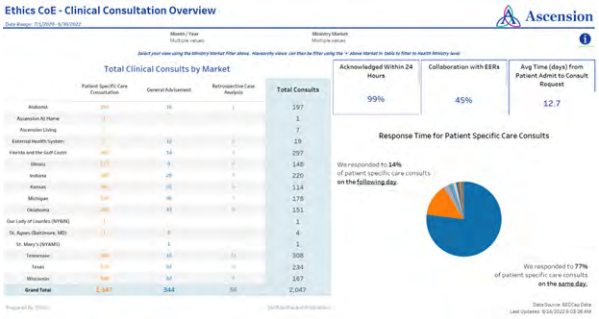


CLINICAL ETHICS CONSULTATION

In looking at the clinical consultation volumes by ministry market relative to our consultation taxonomy (i.e., patient specific care consultation, general advisement, retrospective case analysis), we continue to see an upward trend in patient-specific care consultations year over year (FY21: 705 and FY22: 946 -- not illustrated here). This is significant insofar as patient-specific care consultations constitute the primary way in which ethics supports spiritually-centered, holistic care in the clinical setting as articulated within Ascension's mission statement and explicitly called out as a principle of Catholic identity.

Within Ascension, it is also important to keep in mind that patient-specific care consultation is only one subtype of one service type out of many and does not constitute the whole of the responsibilities of the ethicists, including, and perhaps more importantly, the managers of clinical ethics. Along with clinical consultation, the managers also have primary responsibility for leading the Ethics Integration Committees (EICs), participating on clinical workgroups, clinical ethics education, clinical policy review and development, and identifying and developing integrated solutions to recurring ethical needs within clinical care processes (i.e., ethics programming, services and integration). The larger the ministry market, the more these other responsibilities compete for the time, attention and presence of the ethicists.

TABLE TWO



The additional quantitative data regarding clinical consultations, pictured to the right of the table "Total Clinical Consults by Market," also tell us a little about the quality of the service provided. For example, in Table Two, we note 99 percent of all patient-specific care consults are acknowledged within 24 hours, whether by an ethicist or by an Embedded Ethics Resource (i.e., Ethics Integration Committee Members identified as EERs). Moreover, 77 percent of all patient-specific care consults are responded to, (i.e., the work of addressing the issue began in earnest), on the same day, with another 14 percent responded to on the very next day after the request was made. Considered together, these data suggest that the structures and processes we have put

in place for identifying and addressing the ethical dimensions of patient care are effective, responsive, and highly reliable.

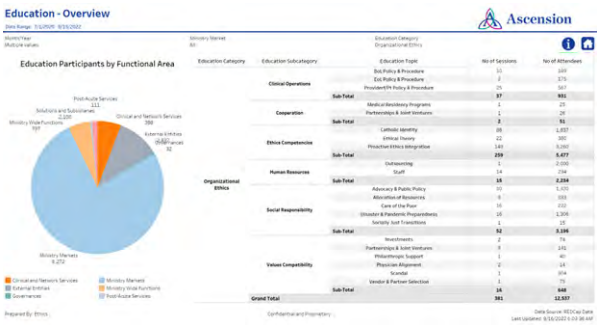
Likewise, the fact that across the entire system, 45% of all patient-specific care consultations involve collaboration with an EER indicates that the capacity to identify and respond to ethical dimensions of patient care is being integrated in organizational structures, processes and operations. Moreover, this capability is not solely dependent on a trained expert being involved in a clinical care process in order to identify and respond to ethical dimensions of patient care. Together these clinical consultation metrics suggest that the organizational layers of a director, ethics integration, manager of clinical ethics, and EERs ensure high reliability in support of spiritually-centered, holistic care.

EDUCATION OVERVIEW

Although we capture data on education in the clinical context as well as organizational, the presentation from the Catholic Healthcare Innovation in Ethics Forum (CHIEF) Presentation 2022 focused entirely on the latter. In large part, this is because work done by my colleague, Matthew Kenney (also featured in this volume of Healthcare Ethics USA), which focuses on education in the clinical context, offers a more in depth analysis of the relationship between clinical consultation and education.[3]

Table Three shows the total of organizational ethics education activities and participants broken down by functional area (see pie chart on the left) and by education topic (see table to the right). The Ethics CoEs provided or co-presented 381 organizational ethics education sessions reaching 12,537 participants over the period July 1, 2020 through September 15, 2022. While FY20 saw the first decrease in participants in organizational education sessions (184 education organizational ethics sessions with 3,290 participants–not shown here), largely due to the disruption of COVID, FY21 and FY22 saw a sharp increase in organizational ethics education. Of the 381 organizational education sessions, a majority (259 sessions reaching 5477 attendees) were related to Ethics Competencies topics. The remaining sessions were divided across Social Responsibility (52 sessions reaching 3,196 attendees), Clinical Operations (37 sessions reaching 931 attendees), Human Resources (15 sessions with 2234 attendees), Values Compatibility (16 sessions reaching 648 attendees), and Cooperation (2 sessions reaching 51 attendees).

TABLE THREE



The value of these data is in the fact that it helps us to quantify the impact we have based on the number of associates in a given geography or within a particular operational or clinical service line. For example, ethics leadership provided an education session to nearly 2,000 associates at the request of Ascension Technologies. The focus of this session was on Ascension's use of the Organizational Ethics Discernment Process (OEDP) for major decisions. This example of

a requested education session was designed to address an outstanding need for a large number of associates to understand how Ascension Technologies was taking Catholic identity and the principles of Catholic social teaching into account as part of its strategic decisions, and how those decisions reflect Ascension's values and ministry identity. This education was particularly important given a new approach to engaging the OEDP that is more integrated -- employing principles of agile thinking -- into the business decision-making processes that helped clarify how Ascension's mission, vision, values, and Catholic identity are considered alongside and on par with the business objectives. These data can help us to illustrate, as in this specific example, the magnitude of the education as a percentage of total associates who fall under Ascension Technologies (i.e., 2000 as X% of total Ascension Technology associates).

These data can also be used to highlight integration of ethics education initiatives. An example of a more integrated approach to education is illustrated by the inclusion of two courses, one on catholic social thought and one on Catholic bioethics, in Ascension's Executive Ministry Leadership program. Previously, ethics led only one course on Catholic healthcare ethics. These two foundational courses now kick off Ascension's two-year formation program and are designed to empower and equip leaders from various areas across the system to recognize when and how the principles of Catholic social teaching and Catholic healthcare ethics are relevant in their daily work.[4] Using these data to examine educational programs within a particular strata of the organization allows us to explore the impact of these educational programs beyond the episodic requests.

CONCLUSION

As we continue to explore the benefit of the interface between REDCap (data entry) and Tableau (data visualization), we find ourselves asking new questions. It seems that it is often through visualizing the data that we come to new insights demanding further study. We know this work will be ongoing as we continue to explore new questions, but it is also through this exploration that we refine the data entry itself. Regardless, as was true in 2020 and remains to date, "a single data repository for analytics has been incredibly beneficial to improve both the quality of the work we do and inform decision-making for the Ethics CoEs across the entire organization." ✣

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ENDNOTES

1. All tables illustrating data in this manuscript are only those shared during the fourth annual Catholic Healthcare Innovation in Ethics Forum (CHIEF) Presentation 2022 and so may be a bit outdated based on current analytics.
2. M. Repenshek, C. Ostertag and E. Trancik, "Data Entry and Analytics: One Year with Ascension's Ethics Integration Database." HCEUSA volume 30, number 1 (Winter/Spring 2022): 4-7.
3. M.R. Kenney, "Ethics Consultation and Education: The Chicken or the Egg?" HCEUSA (Witner/Spring 2023).
4. M. Repenshek, M. Kenney and C. Mueller, " Integrating Ethics in Formation: Exploring Courses in Leadership Formation." HCEUSA volume 29, no. 1 (Winter 2021): 21-23.