

Exploring the Ethics of Social Work Services in a Closed System

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ABSTRACT

Social work services have inherent ethical challenges and tensions based on the type of work that takes place. This is even further exacerbated when this work is moved into an information system. In this paper, we discuss the ethical challenges of developing an information system that address the needs of social workers and patients while at the same time respects security policies like HIPPA and PII as well as the closed system requirements of working in a military setting. We will discuss our strategies of how we have addressed the ethical issues and ask open questions for the future that we would like to receive input back from the workshop participants.

Author Keywords

Social work; ethics; algorithms; decision support; closed system

ACM Classification Keywords

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INTRODUCTION

Information and communication technologies are a critical component of the modern health delivery system [8]. Social work services have also seen a growth in the information tools that facilitate patient care and coordination [6,7]. For example, within computer-supported group work social work services, research has focused on understanding communication patterns [4], impression management [5], follow-up to social work services [11], and assessment [1]. The field has also focused on systems that focus on specific segments of the population like child protection services [3].

The Information and Communications Lab at the Georgia Tech Research Institute (GTRI) has helped various government agencies implement modern technologies and tools to improve information management and communication, leveraging social media and mobile applications to facilitate interactions between the stakeholders and those providing services. Through these projects, we have observed several situations where the need for data security and privacy were at odds with the very functions of the computing platforms that make them attractive to users.

These conflicts are amplified in situations where the users are under stricter rules and norms than the average public users. A case in point is the military service members and their families. Through this paper, we aim to highlight several ethical concerns in sociotechnical systems and digital communities involving user populations that are obligated to comply with stricter data security and privacy rules. What research and design approaches should our community consider for such user populations without sacrificing the affordances of the technology? The intent of this paper is to contribute to the discussion to identify a set of best practices and norms for the GROUP community.

OVERVIEW OF SYSTEMS

The departments that coordinate and provide social services to the military service members and their families rely on a suite of information systems. GTRI is specifically working with two systems - one is used to administer domestic abuse cases and track clinical determinants associated with domestic violence and abuse and the other system helps administer and track non-clinical social work services to service members and their families.

We have found that the military information systems face the same challenges as other information systems that provide social work services in the civilian world. An example is the laws around data security and privacy, specifically around personally identifiable information (PII) and health information (HIPAA). However, military systems carry additional scrutiny due to the military policies and norms that govern this closed community. Designing information systems and making decisions based on these information systems for a closed community present a unique layer of ethical challenges in addition to some of the common ethical issues associated with health systems in the civilian community.

In the following sections, we identify three high-level ethical concerns, describe our approach in addressing these concerns, and outline open points of ethical challenge that remain.

ETHICAL CHALLENGES

The domain of social work services in itself presents several ethical challenges that social workers balance and work through on a daily basis like involuntary commitment,

working with minors and balancing their confidentiality with the need to include parents/caregivers, and being mandated reporters [2]. Below we discuss two ethical challenges currently at the forefront of our work on information systems to support social work services for the U.S. military.

Closed System

While the social workers that we work with all share the above ethical challenges, they do have a somewhat unique challenge in that they are operating within a closed system. The U.S. healthcare system has suffered from being a closed system, yet reforms in the past decade have sought to address these. Yet in the military, these changes are often not possible because of security concerns, the process in which the systems are developed, or the historical institutional policies which are slow to modernize.

Within the closed system, the lack of transparency is problematic on multiple levels. For one, there is a singular option for healthcare. Service members and their families can either use the provided care options or pay out-of-pocket. Transparency often is a key instigator for change. Within a closed system, this is often not an affordance given to stakeholders within the system.

Decision Algorithms

Like most information systems that support the health complex, the military information systems that support clinical and non-clinical social work issues employ the use of decision algorithms to help make determinations related to care. There is a common adage that algorithms are “neutral,” but is that really the case? In a recent post, Tufekci confronts the issue of algorithmic neutrality by stating that algorithms have consequences [9].

In the clinical context, algorithms are being applied to data in the system to make clinical recommendations on treatment. While on one hand, this could potentially cut down on human bias (making more subjective decisions) and help standardize care, there are several problematic issues that have to be addressed [10]. First, algorithms keep information away from the user, deciding on what is visible and what is not. Second, they can be discriminatory just like humans. Algorithms are made by humans and therefore have the same potential for biases. Additionally, it is not transparent that algorithms, and not people, are making these determinations. Because of these issues, there needs to be direct regulation of these algorithms.

Confounding Issues

There are several key confounding issues that aren't specific ethical challenges associated with this research, yet are confounding issues that have to be addressed when tackling these ethical challenges.

Lack of Communication Across the System

The lack of communication across the information systems that supports an individual receiving social work services is not a new phenomenon [4]. Within the military systems, clinical and non-clinical systems are isolated from each

other, negating the ability to have a comprehensive and holistic understanding of the individual accessing services. Because it is a closed system, there is greater potential ability to have information from each of these sides informing the other. This lack of communication and coordination can have negative impacts on the client, and in some cases contribute to severe outcomes like suicide, fatalities, and grave bodily harm.

Specific Social Stigmas

Accessing social services carries with it certain social stigmas. We see this even more within the military context. The military operates as a hierarchical system, which values chain of command and authority. Anything that can diminish the perception of authority and credibility may affect rank and command. Therefore, some service members and families do not want to be seen seeking and receiving social services for fear that this association will negatively impact their chances for promotion or diminish their authority as perceived by other service members. For example, a unit commander may be averse to seeking parenting services because of the concern that his/her underlings might find out and will diminish his/her authority. Another example can include a service member with a child who has special needs and may think that this will hinder his/her chances of being promoted or transferred to another position if it involves relocation.

ADDRESSING ETHICAL CHALLENGES

To address these challenges, our team has setup a socio-technical system for the translation and development of these information systems. For each system, a team of social scientists, engineers, computer programs, and subject matter experts work in collaboration to ensure that in addition to technical requirements, needs of the users and stakeholders and policy issues are being addressed concurrently. Meaningfully addressing these ethical challenges are at the forefront of our design process – they are not an afterthought. This often means that developers are put in the field with the social scientists and vice versa. We have found that by embedding these groups together from the beginning, we have been able to identify and design to the challenges, and not around them which is a common practice within these types of systems.

CONCLUSION

Social work as a field has inherent ethical challenges and tensions. By automating these processes, it is inevitable that the systems designed to support these practices will share in these challenges. There are larger ethical challenges that this type of work must grapple with as it becomes a digital “advocate” for the patient, recommending courses of treatment and allowing social workers access to information they need to make quick yet informed decisions related to the course of care. We look forward to unpacking these tensions with the wider workshop participants and hopefully gaining critical insights as we continue to develop a new generation of information systems to support social service delivery in the military setting.

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REFERENCES

1. John P Hirdes, Gunnar Ljunggren, John N Morris, et al. 2008. Reliability of the interRAI suite of assessment instruments: a 12-country study of an integrated health information system. *BMC Health Services Research* 8, 1: 1–12.
2. Richard Hugman. 1995. *Ethical Issues in Social Work*. Psychology Press.
3. Saila Huuskonen and Pertti Vakkari. 2010. Client Information System As an Everyday Information Tool in Child Protection Work. *Proceedings of the Third Symposium on Information Interaction in Context*: 3–12. <http://doi.org/10.1145/1840784.1840788>
4. Azi Lev-On and Nili Steinfeld. 2014. Managers and members in online communities of practice: what are they talking about? *Proceedings of the 15th Annual International Conference on Digital Government Research*, ACM, 118–123.
5. Jennifer Marlow. 2013. Impression formation in social work-sharing sites. *Proceedings of the 2013 conference on Computer supported cooperative work*, ACM, 69–72.
6. Menachem Monnickendam. 1990. Know, an alternative approach in decision support systems for human services. *ACM SIGCAS Computers and Society* 20, 3: 27.
7. Cristina Oroviogoicochea and Roger Watson. 2009. A Quantitative Analysis of the Impact of a Computerised Information System on Nurses' Clinical Practice Using a Realistic Evaluation Framework. *International Journal of Medical Informatics* 78, 12: 839–849.
8. Thomas Rindfleisch. 1997. *The computer-based patient record: an essential technology for health care*. National Academy Press.
9. Zeynep Tufekci. 2014. What Happens to #Ferguson Affects Ferguson: Net Neutrality, Algorithmic Filtering and Ferguson. *The Message*.
10. Kilian Vieth and Joanna Bronowicka. 2015. Ethics of Algorithms. *Center for Internet and Human Rights*. Retrieved from <https://cihr.eu/ea2015web/>
11. Sheila Zimic and Rolf Dalin. 2016. Systematical follow-up in social work practices. *ACM SIGCAS Computers and Society* 45, 3: 159–166.