

**Scheduling Software in Public Health Practice:  
From Book to Bytes and Back**  
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**Abstract:** Although greater emphasis is placed on public health information transfer, little is known about its implementation in the field. To better understand the information needs of the public health workforce, semi-structured interviews were conducted at a county public health department. Preliminary investigation revealed the underutilization of available scheduling software in this setting. Privacy concerns and idiosyncratic scheduling patterns may have interfered with the adoption of commercially available scheduling software.

**Background:** In an effort to improve patient scheduling a busy county health department adopted an electronic scheduler. However, the scheduling software was eventually abandoned and the clinic returned to the paper scheduler. As part of a larger study of the information needs of the public health workforce, participants shared their perceptions of why the electronic scheduling system had failed.

**Methods:** Thirty-two employees of a rural county public health department in Oregon were interviewed regarding the use of information in their work. The interviews were transcribed and analyzed qualitatively using a constant comparative method.

**Results:** Preliminary analysis of the interviews indicated that the scheduling software provided as part of a commercial software suite was installed but quickly abandoned because it failed to improve clinic scheduling. Unanticipated problems included: 1) *Increased overbooking*. To compensate for frequent no-shows some overbooking was tolerated in the paper systems. However, overbooking became a significant problem with the scheduling software because of multiple simultaneous access and loss of the larger visual landscape provided by the paper scheduler 2) *A loss of flexibility*. The electronic scheduler lacked the flexibility to deal with a variety of nursing schedules including home and clinic visits and various clinical visit lengths ranging from less than 10 minutes for birth control dispensing and over 90 minutes for

pediatric culposcopy for sex abuse work-ups. 3) *Privacy concerns*. Computer scheduling of clients for HIV testing follow-up could not be done without entering personal identifiers, therefore the computer scheduler was not able to replace an elaborate but effective separate paper system developed to maintain confidentiality.

**Discussion:** Implementation of scheduling software is often problematic, yet some characteristics of providing clinic services in a public health clinic may make it more difficult than implementing in the primary care setting. The patient populations' dependability is difficult to predict because of transportation problems, language difficulties and lack of telephone access. Given the idiosyncratic and fluid nature of the client visits (many no-shows and walks in) staff often overbook appointments in the computer system, a restricted phenomenon when scheduling is physically controlled by location and a single book. The time range required for various public health clinical services such as dispensing of birth control in contrast to HIV counseling or pediatric sex abuse may be broader than the average primary care practice. In addition, the need for confidentiality is magnified by the personal nature of many public health services including: treatment of sexually transmitted diseases, HIV testing, and family planning.

**Conclusion:** Semi-structured interviews with county public health workers identified several barriers to the use of scheduling software. While the paper system was fraught with many problems, such as having to keep up with multiple copies of the schedule for the day, when changes occurred this was seen as preferable to the computerized system "glitches". These obstacles should be eliminated if scheduling software is to be successfully adopted in such settings.

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