

Using anthropology to inform a book's transition to digital

The British National Formulary (BNF), a reference book for all medicines used in the UK's National Health System (NHS), was first published in 1949 as a collection of adaptable recipes for making up remedies. With the rise of the pharmaceutical industry, the availability of pre-packaged, manufactured medicines, and their accompanying regulation, the BNF is now a repository of drug functions, uses and interactions with bodily systems. It is currently a vital part of [prescribing practices in the UK](#), with 4 out of 5 prescribers preferring it to other sources.

The BNF is moving towards digital access within the context of a paperless NHS, while the current use is a hybrid of paper and digital. In order to research the problem and understand how the book is used, I undertook a strategically flexible and targeted combination of methods, often called [rapid research](#). My [paper](#) is part of the book [Techno-Anthropology in Health Informatics](#).

Interviews and observations in practice is where anthropology really comes into its own, observing what people actually do, not just what they say they do.

Contrasting the practices in two hospitals situated BNF use within everyday workflows in order to illuminate the hidden assumptions and the way that people conceptualize their actions through the material world around them.

The formulary draws together multiple disciplines, clinical settings and medical professionals such as pharmacists, prescribing nurses, consultants and general practitioners, in order to prescribe and deliver medicines safely. As a book and material object, the BNF provides one way of mediating the relationship between medicines, clinicians and patients. Patients and clinicians have their own agendas and motivations which may or may not align and both are brought together with and by medicines which are curative, but also potentially harmful if inappropriately used.

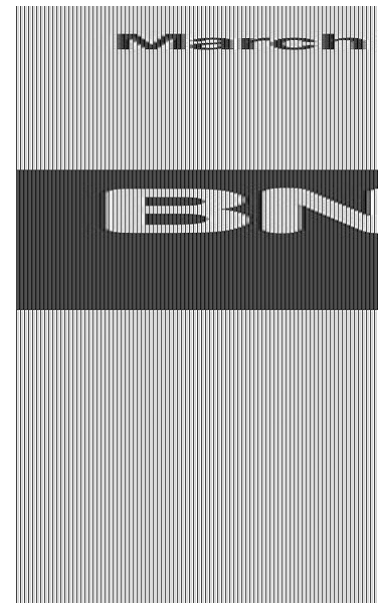
There is no reason to privilege online over offline use and there is no retained authenticity contained within books, paper or off-line worlds.

Rather than paper and digital in binary opposition, the practice of consulting the BNF and dispensing medicines involves what respondents describe as best use of both. Respondents work seamlessly between digital and paper systems in multiple forms: books, charts, posters, notes, sheets, producing an environment of safety. There is no reason to unduly privilege online over offline use and there is no retained authenticity contained within books, paper or off-line worlds.

The BNF provides different kinds of visibility. Pharmacists carry it as a marker of their profession, much like doctors wear a stethoscope. Always at hand, it enables them to check drug safety and interactions for complex conditions such as kidney disease. It makes the process of enabling drug safety visible in order to develop a confidence that it has been materialized in tangible ways.

In addition, the BNF enables clinicians to carry out their work easily and effectively. Books are culturally learned objects and people build up a sophisticated geographical knowledge of the contents, being able to locate the information they need easily. Interviewees often indicated that they reached for the book first because it was quicker than accessing an online source.

Lastly, as a researcher, I pay attention to situations where practice does not accord with an interviewee's



narration. For example, respondents describe combinations of ideal situations and their unexamined assumptions. “It’s the first port of call,” indicated a clinical pharmacist with five years’ experience. A sentiment echoed by almost everyone interviewed, it proved more complex than this. I observed on multiple occasions that more experienced or knowledgeable colleagues were often the first port of call for drug information. Professionals simply overlooked how their colleagues acted as trusted sources of information.

Staff fear that if they access the BNF on their smartphone they will look like they are checking their email in front of patients.

The research also revealed that pharmacists, while not opposed to using a digital BNF, worry about a number of things. There is concern that the infrastructure will require significant investment to support the move to a paperless BNF, with increased computers or tablets required on the wards. Or that if staff access the BNF on their smartphone, they will look like they are checking their email in front of patients. Karen Baxter, Director of the BNF, said she was aware of the many instances where the use of digital devices is considered undesirable by the user and that they would continue to issue print copies as long as there was demand.

Different kinds of methods produce different kinds of knowledge. Quantitative data will indicate that there are over 3 million BNF [book consultations](#) per week but qualitative data provides a rich context: the who, why, where, how and when. When moving from print to digital, especially when professionals are so personally and professionally invested in using the information to produce patient safety, this is not irrelevant. It becomes necessary to consider these ways in which the book becomes part of a professional’s identity and work practice.

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