A Few Thoughts on Evidence in Social Work

Gary Holden
New York University

Ellen Tuchman
New York University

Kathleen Barker
CUNY Medgar Evers College

Gary Rosenberg
Mount Sinai School of Medicine

May
New York University: Polytechnic

See next page for additional authors
A few thoughts on evidence in social work

Gary Holden, D.S.W.

New York University: Silver School of Social Work

Ellen Tuchman, Ph.D

New York University: Silver School of Social Work

Kathleen Barker, Ph.D.

The City University of New York: Medgar Evers College

Gary Rosenberg, Ph.D.

Mount Sinai School of Medicine

May Thazin, B.Sc

New York University: Polytechnic

Sofie Kuppens, Ph.D.¹

Katholieke Universiteit Leuven

Katie Watson, M.S.W.

New York University: Silver School of Social Work

Target Journal: Social Work in Health Care;
doi: 10.1080/00981389.2012.671649

The first author may be contacted at: Room 409, New York University: Silver School of Social Work, 1 Washington Square North, New York, NY 10003, gary.holden@nyu.edu

¹ Sofie Kuppens is a Postdoctoral Fellow of the Research Foundation Flanders, Belgium.
Abstract

Social work practitioners must act every working day in the face of uncertainty. This uncertainty arises in part because knowledge is often difficult to locate or sometimes lacking regarding: the systems context the population being served; the particular client system; the set of problems the client system is experiencing; as well as the various interventions that could be selected. It seems reasonable to explore ways to reduce the experience of uncertainty, and narrow, if not eliminate, the knowledge gaps that arise in such situations. The generic idea of evidence based practice has been advanced for some time as an approach to support practitioners in their day to day work.

This paper has two foci. First, it will briefly and selectively review attempts to make social work practice more evidence based. Second, it will describe one stage in the evolution of a web based service (Information for Practice [IP]). IP is a long term project with the mission of keeping practitioners informed about news and new scholarship in the field, so that they can more easily make their practice more evidenced based.

Keywords: best practices; clearinghouse, evidence based practice, evidence-based practice, evidence informed practice, evidence supported intervention; evidence supported treatment; grey literature, Information for Practice, knowledge dissemination, literature review, literature search, open access; practice guidelines, translational research, treatment manual, treatment protocol
A Few Thoughts on Evidence in Social Work

Although social work clients and practitioners clearly achieve positive outcomes, one can always ask: Where is there room for improvement? A variety of approaches (e.g., evidence based practice [EBP]) have been advanced as a ways to improve practice for years and there are some indications of their adoption (e.g., Howard, Himle, Jenson & Vaughn, 2009). Yet, others have commented that:

[r]epeated demonstration of the beneficial effects of evidence-based psychotherapeutic, case-management, and pharmacologic interventions has not led to widespread implementation of such interventions in usual care settings… Service providers often rely upon non-evidence based practices in providing services to children and families (Aarons & Palinkas, 2007, p. 411).

Contrast Aaron and Palinkas’ comment with the Collins and Daly’s observation in their small qualitative study of social workers:

In the current research, when questioned about what evidence meant in social work, participants overwhelmingly indicated that, to them, evidence was primarily the information, gathered from multiple sources, which pertained to a specific case. This included but was not limited to prior case histories and notes, the social worker’s own observations, reports from other professionals (such as psychiatrists, doctors, police, home care, or education), the views of the service user and the previous knowledge and experience of the social worker. This echoes the findings of a previous survey of social workers commissioned by IRISS . . . . A few participants, particularly in the children and families team, mentioned research as evidence spontaneously but this was in the minority (2011, p. 8)
If social work is going to move towards greater use of evidence from research, how will this occur? How will practitioners learn about, and possibly be influenced by, research? To explore possible answers to these questions, this paper will note some of the observations of others and our own regarding the difficulties of social work practice and the use of evidence in attempting to improve that practice.

**Practice is Not Tidy**

Social work is a fluid profession flowing across time in a chaotic environment. Client systems are often underprivileged and exist in stressful circumstances with underdeveloped capacities. Social workers are, in many instances, BSWs and/or MSWs, who are underprepared, poorly supported, overworked, underpaid, too frequently attacked physically and undervalued in general. Agencies can be as poor and underappreciated as their clients and staff. Research in and about practice is infrequently conducted, underfunded, and often ignored. Dedicated practitioners attempting to incorporate more evidence into their work face real obstacles. Despite such systemic deficiencies, social work professionals must continue to make decisions every day in the face of uncertainty (cf., Barth, et al., 2012; Institute of Medicine, 2011).

**The Internet is Not Tidy**

All professionals now face an evolving task: how to navigate the increasingly dense and rapidly growing volume of information. De Kunder (2011) estimated there were 12.13 billion web pages on 9/9/11. Gabler recently commented that, “[we] live in the much vaunted Age of Information. Courtesy of the Internet, we seem to have immediate access to anything that anyone could ever want to know” (2011, p. 1). Yet, the quality of information online regarding specific issues has been found wanting for at least a decade (e.g., Eysenbach, Powell, Kuss & Sa, 2002; Khazaal, Chatton, Cochand & Zullino, 2008). Regardless of how one assesses the utility of
information found ‘online’ (we know this category has become more varied as scholarly sources have moved online), we assume use of online information sources by social workers has increased since the turn of the century (e.g., Barnett-Queen, 2001; Ishizuki & Cotter, 2009). The increasing amounts of available information and the goal of increasing use by practitioners mean that navigation tools become increasingly important. For instance, it has been estimated that 92% of adult Internet users in the US use search engines (Purcell, 2011). Are search engines meeting professionals’ needs to effectively and efficiently find relevant information? Are social work practitioners’ search skills keeping pace? Most searches by novices will produce ‘something’ on the topic of interest – but what is the quality of that something. If, as often happens, a search returns hundreds or thousands of hits, how deep into that mass does the searcher venture? Do they only consider the first or second page of results (e.g., 10-20; cf., Jansen, Spink & Saracevic’s, 2000; Silverstein, Henzinger, Marais & Moricz, 1999)? Do they consider the methods of search engine companies and how those entities determine the most relevant information displayed for users? Do these searchers use more than the 2-4 query range (per search session) Markey (2007a) reports in her review? Markey goes on to note that “[a]lthough research findings demonstrate that end users are not conducting very sophisticated online searches, the vast majority are satisfied with their searches” (p. 1078, cf., Markey, 2007b).

**Literature on the Application of Evidence to Social Work**

To those unfamiliar with the application of evidence in social work, discussions of the concepts may appear confusing (cf., Barth, 2012et al.). In our view, dividing the overall topic into four categories adds clarity (see Figure 1). They are:

- **General processes** which are intended to help practitioners incorporate the best available evidence into their practice. These include EBP and EIP (evidence
informed practice) (e.g., Gibbs, 2003; Roberts & Yeager, 2006; Rubin, 2008; Sackett, Richardson, Rosenberg & Haynes, 1997).

- **Specific products** that are some form of intervention or treatment with a body of evidence which suggests they could be used successfully in practice. These have been referred to in the literature as: empirically supported treatments (ESTs); evidence supported interventions (ESIs); evidence based practices (EBPs) (e.g., Rosen & Proctor, 2002; Thyer & Meyers, 2011; Woody & Sanderson, 1998; cf. Thyer & Pignotti, 2011, re: the ‘non-existence of EBPs’).

- **Implementation directions** are more detailed guides to delivering intervention products or carrying out some process in practice that may have varying degrees of evidence supporting them. Subtypes of this category found in the literature include: treatment manuals (TMAs); treatment protocols (TPs); clinical practice guidelines (CPGs); best practices (BPs); and implementation toolkits (ITs) (e.g., AHRQ, 2011a; CALSWEC, 2011; Institute of Medicine, 2011, Mullen & Bacon; 2006; Roberts & Yeager, 2006; Woody & Sanderson (1998).

- **Filtering tools** provide access to a selection of Internet based information. Wilson (2002) notes that these can be viewed as gateways for which content is selected for a more or less specific group of intended users. This proposed category also includes tools such as open access (OA) repositories and vortals (vertical industry portals). The goal is to increase the sensitivity and precision (e.g., Taylor, Wylie, Dempster & Donnelly, 2007) of practitioner searching by providing the searcher with a database from which less relevant information has been excluded.

---

Insert Figure 1 about here
Different combinations of the conceptual categories above might be employed depending on the particular practice problem. For instance, a practitioner might employ an EBP approach that included doing a search of a database like PsycINFO covering content relevant to the professional issue, to discover an ESI and a related TM that would guide the application of that ESI. Conversely, a practitioner might use an EBP approach and search key databases, OA repositories and vortals, to discover the best evidence regarding the typical course of the condition the client has (e.g. recent diagnosis of a chronic illness). That process might not include a specific product or directions for implementing a specific product (e.g., ESI or TM).

**Application of Evidence to Social Work is not Tidy**

In describing the role of science in social work, Reid (2001), focused on two different uses of science when he observed:

One has been to follow a scientific model in conducting professional activities: science as a method. For example, a physician or social worker may use diagnostic tests and systematic observation, form hypotheses, evaluate results and so on in treating a patient or client. The professional here is behaving like a scientist in the case at hand. The other has been to use scientific knowledge to inform those activities: science as knowledge. In this usage the physician or social worker applies research-based knowledge to enhance understanding of the patient or client (assessment knowledge) or to remedy his or her problems (intervention knowledge). (p. 274)

Reid also raised a criticism relevant to utilizing research based knowledge for practice -- that is that ‘*insufficient research based knowledge exists to guide practice*’. Consistent with evidence
based practice and practice guidelines proponents, Reid asserted that a considerable body of knowledge is available to practitioners.

While we agree in general with Reid on this point, it seems clear that there are many obstacles between the body of relevant research that exists and the practitioner in the workplace. A key example is cost. As previously noted, social workers and social agencies are often underfunded. Professionals who are trying to get inside the discourse of their profession may not be able to afford access to the gated community of peer-reviewed publications. Although access to Campbell Collaboration materials is free, Cochrane Collaboration full text content is not ($310 per year). Similarly, in 2011 NASW Press charged non-members $95.00 for access to each of their four journals (NASW, 2011). The United States price of Oxford University Press journal, *British Journal of Social Work’s* is more ($178; OUP, 2011). Given the choice of many governments to cut social programs rather than tax upper income groups and businesses fairly, it seems unlikely that practitioners’ information environments will be enhanced through governmental funding streams any time soon. The movement to open access (OA) online journals has proceeded much more slowly than many had hoped due to resistance within the publishing industry, as well as from academics who are appropriately concerned about how their publications in OA journals will be treated in reappointment, tenure and promotion decisions. 

*Regardless of the underlying causes, the dissemination of research to practitioners can, and must, be improved.*

**Some observations on progress and obstacles in practice**

The next four sections of this introduction will examine some of the recent work that has been done within the first three categories of Figure 1 (*general processes; specific products;*...
implementation directions). This will be followed by more in depth examination of a tool that falls within the fourth category of Figure 1: filtering tools.

**General processes.** Are social workers implementing the general process of evidence based practice? Morago (2010) surveyed 357 social care and social work agencies in the UK and the majority of responses were from social work professionals (86.4%). Of the total sample, 16.1% had attended training for EBP and another 36.8% responded that they had good knowledge of EBP although they had not participated in training for it. Less than 1 in 10 (9.7%) were involved in some way in the creation or operation of evidence based programs. Staudt and Williams-Hayes (2011) found that child advocacy center therapists in their study (47.6% had degrees in social work) were generally positive about evidence based practice. Among other caveats, they suggested that this result might be, in part, due to the fact that this was a group of specialist providers rather than a group that was working with diverse client populations in which keeping up with the literature would be more difficult.

Howard and colleagues (2009) argued that a lack of adoption of EBP may not be exclusively the result of practitioner resistance but due to the quality of and ease of access to the evidence base practices that social workers are being encouraged to use. A reasonable question is this: is there enough social work research disseminated in forms that practitioners are able to easily use to reduce uncertainty in practice (especially without paying access fees)? For instance, Shlonsky, Baker and Fuller-Thomson (2011) noted two explanations in the literature for the limited application of EBP.

- the information to reduce uncertainty may not exist; and
- social work practitioners do not have the time to find what does exist.
Shlonsky, Baker and Fuller-Thomson explored the utility of methodological search filters as a method of reducing the time to find relevant information. As part of this exploration, these researchers developed the Avalanche Index (AI) described as, “the number of hits [search returns] one would need to read through in order to find one of the studies (i.e., studies included in a review)” (no p.). While it seems clear to us that better search strategies (e.g., with improved filters) should produce better results, and in fact the approaches designed by Shlonsky and colleagues do appear to do that, an important question remains: how long and how much effort will it take to improve the results to a level that will have utility for practitioners? Shlonsky’s team report average AI measures in the 233-588 range (for two databases across multiple reviews). Assuming a practitioner actually has access without cost barriers (a topic we will return to later), how long will it take the average MSW practitioner to review each article to make an include/exclude decision regarding its applicability to their particular clinical question? Fifteen minutes per article on average will serve as an exemplar for our purposes. Take an optimistic AI estimate of 200 and assume that there are five articles that should be found. That would mean this practitioner would have to spend approximately 250 hours to screen the search yield to obtain the five articles. \[ 5 \times 200 \times .25 \text{ hrs} = 250 \text{ hrs } \]. How realistic is this and for how many questions regarding clinical practice (cf., Stanhope, Tuchman & Sinclair, 2011)?

Moreover, all of the difficulties of carrying out the evidenced based practice process should be considered in the relation to the zeitgeist of rising expectations. For instance, the Agency for Healthcare Research and Quality’s Effective Health Care (EHC) Program, has begun a discussion of the possibility of conducting peer reviews of database search strategies (EHCP, 2011). Will MSW practitioners be able to conduct literature reviews that are acceptable, given the evolving state of the art?
**Specific products.** Thyer and Meyers (2011) trace the genesis of ESTs to the American Psychological Association Division 12 *Task Force on the Promotion and Dissemination of Psychological Procedures* (TFPDPP, 1993). They also noted that this development was followed by various monographs and edited collections, as well as related efforts by organizational entities (e.g., Substance Abuse and Mental Health Services Administration in US; National Institute for Health and Clinical Excellence in the UK). A variety of approaches have been employed to rate the evidence regarding interventions. For instance, the California Evidence-Based Clearinghouse for Child Welfare uses a 5 point scale (CEBCW, 2011). Regardless of the number of cut points in any intervention effectiveness categorization scheme additional research and discussion regarding such categorizations would be helpful.

In a qualitative study of child welfare workers in California, Aaron and Palinkas’s (2007) found a number of potential problems in the introduction of “an EBP”, such as acceptability of the EBP to stakeholders and perceived support for implementation of the intervention (p. 411). They concluded that “[c]onsideration of multiple levels including the system, organization, provider, and consumer . . . is needed to improve the process and outcomes of … implementation” (p. 419). We would agree that research on implementation has substantial potential. This assertion receives some support from the relatively recent appearance of the open access journal *Implementation Science* (Eccles & Mittman, 2006).

**Implementation directions.** According to Mullen and Bacon (2006), the advantages of CPGs include a focus on specific practice issues, conditions, and populations, that they are oriented to practitioners, are worded specifically enough to offer practitioners clear guidance and include directions to be taken in treatment. They may result in cost savings as well. Kosimbei, Hanson and English’s (2011) systematic review examined 15 studies (11 intervention and 4
modeling studies) of the impact of clinical practice guidelines on physicians’ prescribing behavior. They note that the “interventions aimed at changing clinician behaviour either through training, prompts, feedback, supervision or a combination” (p. 3). They reported that all, except one of the intervention studies, found financial savings and that those savings ranged from 6% to 57%. Yet, they noted that among a number of caveats related to such studies is how costs savings are calculated (i.e. as part of subcomponent costs vs. as part of overall costs). To date we have not seen a discussion of the costs saving potential of practice guidelines in the social work literature.

Mullen and Bacon (2006) cautioned social workers that extant guidelines may not be based on empirical support but on consensus in a particular area (cf., Howard & Jensen, 1999). Howard and his colleagues (2009) suggested the possible utility of clinical practice guidelines, yet noted that some have criticized such guidelines as not responsive enough to changes in the evidence base over time. Alonso-Coello et al. (2011) explore this critique in a survey of 44 institutions involved in producing CPGs. While 64% of the sample “supported the concept of “living guidelines” … that are continuously monitored and updated” (p. 9), only 27.8% categorized the guideline updating process as ‘very rigorous’.

The recent report by the Institute of Medicine’s Committee on Standards for Developing Trustworthy Clinical Practice Guidelines (Institute of Medicine, 2011) clearly summarize the concerns with CPGs.

Certain factors commonly undermine the quality and trustworthiness of CPGs. These include variable quality of individual scientific studies; limitations in systematic reviews (SRs) upon which CPGs are based; lack of transparency of development groups’ methodologies (particularly with respect to evidence quality and strength of
recommendation appraisals); failure to convene multi-stakeholder, multi-disciplinary guideline development groups, and corresponding non-reconciliation of conflicting guidelines; unmanaged conflicts of interest… and overall failure to use rigorous methodologies in CPG development. Furthermore, evidence supporting clinical decision making and CPG development relevant to subpopulations, such as patients with comorbidities, the socially and economically disadvantaged, and those with rare conditions, is usually absent (p. 2).

While the issue of comorbidities and guidelines has been discussed in social work, we have not seen an examination of guidelines relevant to social work like the one published recently by Fortin et al. (2011) in medicine.

As with CPGs, if we had recently updated TMs for major areas of practices they would very likely be useful. Questions remain, however, regarding how TMs would be made available and how much of a financial cost they would pose to the practitioner? For instance, LeCroy’s (2008) edited volume *Handbook of Evidence-Based Treatment Manuals for Children and Adolescents* sought to present “detailed procedural descriptions” for interventions with behavioral problems. It presents 15 treatment manuals and lists for $65.00. Similarly, Barlow’s (2008) edited volume *Clinical Handbook of Psychological Disorders* presents background and “[a] detailed description of the actual step-by-step process of assessment and treatment” of 16 disorders along with common problems that may be encountered. It lists for $85.00 and is (as are the other edited collections noted) becoming dated over time (cf., Leahy, Holland & McGinn, 2011; O’Donohue & Fisher, 2009). Describing their experiences with the Robert Wood Johnson/Center for Mental Health Services’ Evidence Based Practice Project, Stanhope, Tuchman and Sinclair (2011), noted that:
Frequently, students were responsible for facilitating WSM or IDDT groups (Wellness Self Management or Integrated Dual Disorders Treatment) and sometimes without workbooks or manuals despite requests for more educational materials. In many sites the Evidence-Based Practices tool kits, resources developed by Substance Abuse and Mental Health Services Administration and Center for Mental Health Services were unavailable. Furthermore, students identified a lack of technology and resources such as computers, access to internet for online resources, subscription sites (such as Cochrane and Campbell Collaborations), full-text articles and curriculum based resources, information about evidence-based practices. Access to research was needed for students both to broaden their own knowledge base about a particular EBP, to tailor the EBPs to the needs of their individual clients, and to address issues related to engagement and therapeutic alliance. The lack of resources was often a result of poor funding overall or not allocating funds towards identifying, instituting and maintaining research and technology in their agencies (p. 372, explanation of acronyms added).

Even if an EBP process is carried out and an EST with a TM is found, is that enough? If that EST and TM require skills absent in the practitioner(s), then additional training and supervision, and often funds to pay for those supports, are required. And, even that may be insufficient. The systematic review of Beidas and Kendall (2010), from a systems-contextual framework, extends and provides a sobering echo of Stanhope, Tuchman and Sinclair’s observations.

In summary, a substantial amount of work has been accomplished on incorporating more evidence into social work practice. Thyer and Meyer’s (2001) assert that, “[c]ertainly the language, if not the conceptual approach, of EBP have reached a tipping point in the United States” (p. 22). Perhaps a tipping point has been reached, but questions remain, including:
• What proportion of social work practitioners employ aspects of evidenced related processes or products discussed above?
• What proportion of cases are they used in by those practitioners utilizing them?
• What filtering tools are available that might help increase these proportions?

The remainder of this paper focuses on the last question, by describing a filtering tool designed to increase the proportions of practitioners’ practice that are evidenced based.

Filtering Tools / Information for Practice

Our long held view is that dissemination processes are needed beyond teaching the general process and creating specific products or implementation directions. The driving conceptualization of our work is providing the practitioner with a free, virtual, professional library. Information for Practice (IP) [ ifp.nyu.edu ] is how we have enacted that conceptualization. It serves to deliver news, new scholarship and more to the practitioner at the point of care for free (e.g., Holden, Barker, Rosenberg & Cohen, in press). It contains a series of categories: journal articles abstracts; open access journal articles; guidelines plus; monographs and edited collections; news; grey literature; calls; clinical trials; and funding. In addition multimedia content is contained in additional categories: images in the news; video; infographics; and history. Some of our Fall 2011 additions to IP’s history category demonstrate that attempts to improve practice through the provision of information is not new. These include: The Training of Pauper Children (Kay-Shuttleworth, 1839); Evidence on Poor Law Medical Relief (Select Committee of the House of Commons, 1862); and the Hand-book for Visitors to the Poorhouse (Olmstead, 1888).

Primary categories on IP’s home page contain snippets of information and provide hypertext links to the material which is located on other sites. In some instances (e.g., open
access journal articles, guidelines plus, grey literature, etc.), these links are to free, full text materials, thus eliminating the access toll problem noted above. Beyond using the IP web site directly, the practitioner can create personal RSS feeds from the entire site or from any subset of categories. They can also follow a selection of IP’s content on Twitter (@Info4Practice) or Facebook (http://www.facebook.com/pages/Information-for-Practice/144875222244161).

The original site that IP eventually evolved from was based on Gopher space (pre-cursor to the WWW). It was created in 1993 (Holden, Rosenberg & Weissman, 1994; 1995), prior to the development of the evidence based clearinghouses described by Soydan, Mullen, Alexandra, Rehnman and You-Ping (2010). In addition, IP has always had a broader focus than the clearinghouses described by Soydan and colleagues (2010). The most recent version of IP was substantially reconstituted in November, 2010. IP and its earlier versions developed during the same time period as the excellent Resource Discovery Network in the UK. This service evolved into Intute in 2006, but unfortunately closed down in July 2011 (Hiom, 2006; Intute, 2011).

Although primarily a sweat equity effort, IP has been generously supported over time by: the Silver School of Social Work; the Division of Social Work and Behavioral Science, Mount Sinai School of Medicine; Dr. Helen Rehr; the Cordellia Foundation; and New York University.

Morago’s (2010) findings seem to support the general ideas behind IP. When asked what they thought would facilitate the incorporation of EBP into practice settings, the greatest percentages of respondents reported: “more time and/or resources” (90.3%); “dissemination of research findings in a user-friendly and understandable way” (80.6%); and “more information and/or training” (72.3%) (p. 460). While IP cannot create more time in the practitioner’s life, it can make the practitioner’s search for information more efficient and thus reduce uncertainty in a larger proportion of cases than would have been possible without IP. Although, IP is not yet
evolved to the level of some of the decisions support systems seen in medical settings (e.g., Kawamoto, Houlihan, Balas & Lobach, 2005), it is hard to imagine that such systems will be incorporated into the bulk of social work practice in the near future.

Currently (10/31/11) IP has a total of 36,540 posts. We have not done formal outcomes assessment of the site. Rather we have relied from the beginning on use data as an indicator for the utility of the site. Data are acquired from both WordPress and Google Analytics. It is market view of outcomes, if the site is useful, people will use it. There were a total of 91,367 visits or 272 visits per day on average to IP between November 30, 2010 and October 31, 2011 with 45,625 absolute unique visitors (the total number of individuals who visited IP at least once during that period). Across all visits, the average number of pages per visit was 1.67 and the average time spent on the site was 2 minutes and 44 seconds. Obviously a number of users will come to the site by accident or come to the site once or a few times and not find it useful. So one relevant statistic is the number of visitors who return more than a few times (visitor loyalty). Among the total number of 91,367 visits, 46,122 (50.5%) were returning visitors. Out of all visits one third (34.0%) came back more than 26 times and 15.5% came back 201 or more times.

Most visits (57.6%) came directly to the site (no specific source) and 22.5% of visits came via search engines (e.g., Google, Yahoo, Bing). Google accounted for 96.2% of the search engine traffic to the website. The remaining 19.9% of the visits came from referring websites that included a hyperlink pointer to IP. During this period, IP received visits from 161 countries / territories. As can be seen from Figure 2, 73.1% of visits came from United States, followed by Canada (11.6%) and United Kingdom (3.4%). Within the United States, there were visits from all 50 states, but about one third of the visits (36.0%) originated from New York, followed by Massachusetts (11.0%) and Florida (6.1%).
With the addition of overall and category specific RSS feeds to IP, a new types of ‘use’ become interesting. For instance, IP has been receiving an average of 334 RSS feed visits per day. In terms of social media, we tweeted a selection of IP content during this eleven month period (3220 tweets, done manually), and had 622 followers on Twitter as of 11/1/11. We have also begun experimenting with an automated broadcast of IP content to Facebook. Beyond these statistics, IP also uses a monthly alerting service that notifies users the previous month’s archives are available. Currently 3240 individuals are enrolled in this service.

Some caveats. IP might be more useful if it created and delivered pre-digested clinical summaries regarding professional topics of interest as some services do (e.g., UptoDate, http://www.uptodate.com). On the other hand, the amount of resources required to create such a service in a professional field as wide-ranging as social work would be large and likely difficult to a support financially. Few supporting advertisers come to mind and the end user populations (e.g., social workers, social work students and faculty) are poorly compensated which would logically lead one to conclude that creating such a fee based service in social work might not be successful. The current cost of individual access to UptoDate is $44.95 for 30 days, while a one year subscription to Dynamed for a licensed medical practitioner is $199.95 (http://dynamed.ebscohost.com/). Added to this mix is the issue of keeping such point of care services current as revealed by the findings of Banzi et al. (2011). Even if such a service eventually appears in social work, it would likely still not contain all of the features that IP
currently does. That said, IP will link to the relevant contents of any such service that makes their content available for free online.

IP does not and never will provide complete coverage of all of the potentially relevant information practitioners might want. We know of no database that does -- an observation that all searchers should remember (e.g., Flatley et al. 2007; Holden et al., 2008; 2009; Kemp & Brustman, 1997; Mendelsohn, 1986; Shek 2008; Taylor et al., 2006, 2007; Tomaiuolo, 1993).

Improving IP

While obviously imperfect, IP does provide assistance with incorporating evidence into social work practice. In terms of the general process, IP can serve as an ancillary filtering tool that contains an array of content not typically found in such specialty services. In terms of specific products, IP has historically covered evidence supported interventions that were available on the Internet. Finally, while providing some coverage of implementation directions such as CPGs in the past, IP recently sought to improve this coverage (see below).

Reviewing IP during 2010-11 we identified two weaknesses that represented opportunities for improving the site substantially.

Guidelines Plus category upgrade. In early 2010 we were planning to develop a custom Google search engine that would allow for IP based guideline searches of both IP and the wider Internet. As we were talking though this possibility, two of the practitioners on the team noted that the kinds of practice guidelines that we were linking to in the Guidelines Plus (e.g., ones found at the National Guidelines Clearinghouse) were less useful than one might expect. Although they offer a substantial amount of detail, the specifics of the actual intervention were often missing, and therefore they would be less than optimal guides for practice.
While we continue to think that IP’s Guidelines Plus category has utility for some practitioners in some situations, it was clear that this category was missing important information. In the past, if a treatment manual had appeared in the yield from IP’s various information sources it would have been included. However, we had not made the conscious decision to make a dedicated effort to obtain these materials more systematically. Barth and colleagues (in press) asserted that “[d]espite the increasing number of manualized treatments, the dissemination and implementation of manualized evidence supported treatments (MESTs) remains strikingly limited in practice settings” (in press, no p.). This observation supports our decision to increase the presence of TMs on IP.

We proceeded to do a substantial amount of Internet searching for treatment manuals that were relatively current and available (full text for free). We next reviewed lists of evidence based web sites in an effort to capture what might have been missed by those prior searches. We also searched Google Books (for freely available full text). All of the relevant content that was uncovered was added to our IP category - Guidelines Plus. Although this process has produced limited results to date we continue to search for relevant content. The name of this category was not changed as we thought it was broad enough to capture content like treatment manuals. Guidelines Plus contained 754 entries on 11/1/11 (it had contained 289 entries on 8/7/11) and continues to grow daily. Improving the content added to IP is an ongoing effort, of which, the addition of a treatment manuals category is just one part.

**Advanced search procedure.** The purpose of an ongoing parallel process is to improve the ease with which users can find what they need on IP. As the amount of content in IP increases, efficient navigation gains increased importance. Although the IP site is easy to browse by month (of content entry) or by topical category (e.g., meta-analyses and systematic reviews),
we determined that the simple search that was being used with the new version of the IP that came online in November 2010 was less than optimal unless the user was a proficient searcher who could construct Boolean searches. To rectify this issue, the IP team decided to create an Advanced Search Procedure. After substantial testing by our team and some generous colleagues, the final design in Figure 3 was created and added to IP in October 2011.

The main goal of IP Advanced Search is to help users design a search process that is both intuitive and similar to other advanced search procedures they have likely used (e.g., Google, Yahoo, etc.). Not all users are familiar with using Boolean logic in searching (i.e., the operators such as AND, OR, NOT, etc.). So IP Advanced Search provides two options. First, the top Basic Search box is for proficient searchers who understand Boolean logic and are comfortable using it to compose more complex searches. Second, are the four separate search boxes below the top box that allow searchers to easily specify the details of their search strategy (e.g., entering terms in: all of the words; this exact phrase; any of these words, and/or none of these words (see Figure 3), rather than constructing it using Boolean operators in the Basic Search box.

IP Advanced Search also allows faceted search (e.g., Lemieux, 2009). The default for searches on IP is to search the entire database. But within Advanced Search, the user can specify a search of a smaller set of categories. For instance, if a social worker is interested in deciding how to intervene regarding a particular problem, they might want to restrict their search to the Guidelines Plus category. Beyond this faceted aspect, the user can search for their search terms in only the titles of entries on IP or in the entire record. The first choice will logically produce a smaller set of returns where the search terms are more central to the document.
The new IP Advanced Search seeks to get all searchers to the content they need more efficiently. Beginning with a smaller, but more select database (than Google for instance), the IP Advanced Search: allows more experienced searchers to construct free form searches; helps less experienced searchers construct more complex searches; and allows all searchers faceting options to make their searches more effective.

**Discussion**

So where do the observations above leave us regarding social work, evidence and the transmission of evidence? We thought before we started this paper and we remain convinced that practitioners who want to improve their practice by making it more evidence based face real difficulties. We agree with Wilson, Rourke, Lavis, Bacon and Travers’ (2011) assertion that:

there are many potential challenges related to research use. Barriers that have been consistently identified across sectors include: the complexity of research evidence, organizational barriers, lack of available time, poor access to current literature, lack of timely research, lack of experience and skills for critical appraisal, unsupportive culture for research, lack of actionable messages in research reports, and limited resources for implementation…. Given these barriers, it is not surprising that a lack of uptake of research evidence has been noted in many different sectors (2011, p. 1-2).

Will the addition of more examples of implementation directions like TMs and upgraded advanced searching make IP an optimal resource? No. First, as important as TMs are, we need to remember what Henggeler and Schoenwald (2002) pointed out some years ago.

Variables influencing treatment fidelity, including the quality of the treatment manual, can be conceptualized from a social ecological framework. Practitioners are embedded in quality assurance systems (e.g., manuals, supervision), which are embedded within
organizations, which are embedded within community contexts. Variables at each level of analysis influence practitioner behavior and, in many cases, can undermine the intents of the best conceived treatment manual. (p. 419)

Clearly TMs are only one part of the solution. Second, as we have noted in previous work (Holden, Barker, Rosenberg, Kuppens & Ferrell, 2011), even proprietary database systems used by scholars (e.g., Social Work Abstracts) have problems that are not insignificant. Although the capabilities of these proprietary systems have clearly increased, we continue to wonder about the reliability and validity of the searches produced by them. IP is not immune to such problems and this is a factor that practitioners should always keep firmly in mind. These are imperfect systems, being used in imperfect ways, usually by non-expert searchers.

Regardless of the quality of information delivery systems, at least two end user issues remain. First, while these systems continue to evolve, some recent findings suggest that practitioners (across professions) were more likely to turn to or be influenced by interpersonal channels (e.g., significant mentors; respected therapists; colleagues) as opposed to other channels such as journals and ‘Internet-based information’(Cook, Schnurr, Biyanova & Coyne, 2009; Dwairy, Dowell & Stahl, 2011). Tendencies to be more influenced by those with whom one has a social relationship may very well extend into the Internet realm and we could find that connections within social networking sites are relied on more than information push sites like IP. Then again, if information delivery systems like IP continue to improve, perhaps the sources that practitioners turn to will change. Regardless of what transpires, we think that the some practitioners will focus on the quality of the information rather than the mode by which the information is transmitted.

Second, as Reid (2001) asks, “[w]ill practitioners implement research-based interventions
with sufficient fidelity?” (p. 281). This is an important empirical question for social work relevant evidence dissemination in general and for IP in particular. It is one thing to efficiently deliver the necessary information and quite another for that information to be used effectively in practice, over time. A related warning has emerged in healthcare regarding the delivery of too much information. Carthey, Walker, Deelchand, Vincent and Griffiths (2011) suggested that a number of problems for providers are associated with the evolution of guidelines (e.g., increasing volume; multiple examples for a topic; overly long and complex examples; problems tracking versions of a guideline). Leach and Segal (2011) move beyond practitioners’ issues with treatment fidelity with CPGs to explore potential threats to patient self-care in their discussion of diabetes mellitus (e.g., cognitive ability; health literacy; mental wellbeing; physical ability; etc.).

Given our experience with ‘guidelines’ for researchers/scholars, we can empathize with the diminishment of intrinsic motivation that such guidelines can produce (APA Publications and Communications Board Working Group on Journal Article Reporting Standards, 2009). These dilemmas emphasize the importance of translational research.

Yet, as Shlonsky, Noonan, Littell and Montgomery have recently noted: “we must continue to find ways to increase the efficiency of evidence gathering and appraisal so that practitioners can spend more time with clients, integrating this evidence with client context and values to optimize decision-making” (2011, p. 363). We believe IP answers this call to bring more efficient evidence gathering systems to underpaid, under resourced practitioners working in budget strapped, information poor environments. It is merely one attempt to increase the application of evidence in social work practice. Many such attempts will be necessary in the future.
Perhaps Rosen (2008) captured the spirit of IP best in his discussion of the ethics of the link. He said:

As a blogger what I try to do is do everything well, all the time and give you way more than you asked for every single time you come to my blog – more knowledge than you thought, more links than you bargained for, more nuance, more depth, more education than you imagined when you clicked that link.

That is what we want practitioners to experience when they click on that link to IP.
References

http://www.ngc.gov/about/index.aspx


http://calswec.berkeley.edu/calswec/implementTk/impTk_home.html

Campbell Collaboration (2001). *Campbell systematic reviews: Guidelines for the preparation of review protocols (Version 1.0)*. Retrieved from Campbell Collaboration Website:  
http://www.campbellcollaboration.org/resources/guidelines/review_protocol_guidelines.php


http://www.cebc4cw.org/ratings/.


http://www.worldwidewebsize.com/


http://www.ariadne.ac.uk/issue47/hiom/intro.html#future


http://www.nap.edu/catalog.php?record_id=13058


http://www.uie.com/articles/faceted_search/


Figure 1. Aspects of evidence in social work practice with examples
Figure 2. Top Ten Geographic Sources of Traffic for IP

- United States: 73%
- Canada: 12%
- United Kingdom: 3%
- Australia: 12%
- Taiwan: 3%
- India: 3%
- Germany: 3%
- Hong Kong: 3%
- The Netherlands: 3%
- New Zealand: 3%
Figure 3. IP Advanced Search

information for practice
news, new scholarship & more from around the world 11 03 11

Basic Search:

Advanced Search:

Category List
- Calls & Consultations (605)
- Clinical Trials (371)
- Funding (774)
- Grey Literature (2390)
- Guidelines Plus (2758)
- History (383)
- Images in the News (1926)
- Infographics (382)
- Journal Article Abstracts (13352)
- Meta-analyses - Systematic Reviews (470)
- Monographs & Edited Collections (382)
- News (12820)
- Open Access Journal Articles (1728)
- Video (490)