

The Evolution of Drug Information Centers and Specialists

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As a clinical practice, drug information involves the efficient retrieval, evaluation, and communication of medication information to assist in care decisions, develop evidence-based recommendations, and improve patient outcomes.^{1,2} Drug information as a specific area of pharmacy practice was initially described in the early 1960s. In August 1962, the University of Kentucky opened the doors of the first formal drug information center (DIC) in the United States.³ The center was conceived as having multiple purposes and one overarching goal—to “support, assist, and promote a rational drug therapy program” at the University of Kentucky. The

center aimed to achieve this goal through educating and influencing current and future health care providers with regard to appropriate patient-specific drug selection. The creation of the University of Kentucky DIC marked one of the initial steps in the metamorphosis of the pharmacist from drug distributor toward medication therapy expert and integral member of the patient care team.

With the success of the University of Kentucky experience, additional DICs were established throughout the 1960s to the 1980s.⁴ Per the results of a survey by Rosenberg and colleagues, the number of pharmacist-operated DICs in the

Table 1. ACCP DI PRN recommendations for drug information practice.¹

Practice area	Recommendations
Academia	<p>Drug information specialists in academic DICs should have extensive postgraduate training (i.e., pharmacy practice residency plus a drug information specialty residency or equivalent drug information practice experience).</p> <p>Training of drug information skills to pharmacy students, residents, and practitioners should remain a focal point for academic drug information specialists.</p> <p>Academic DICs should explore alternative means of financial support, such as fee-for-service activities.</p>
Health systems	<p>Drug information specialists should continue to be intimately involved in therapeutic policy management and consult on challenging drug information inquiries.</p> <p>Specialists should be engaged in the following activities: medication safety initiatives, purchasing of drug information resources, and drug shortage management.</p> <p>Drug information specialists should also evaluate patient outcomes with regard to drug-related policies and potentially become involved in investigational drug services.</p> <p>Other areas of potential involvement include training employees regarding the availability and use of drug information resources; developing drug alerts for software programs, such as CPOE; and handling difficult reimbursement issues.</p>
Managed care	<p>Organizations that provide traditional drug information services to employees or members should employ a drug information specialist.</p> <p>Drug information specialists that participate in activities such as formulary management, medication use evaluation, and adverse event monitoring in this setting should have postgraduate training in drug information or managed care.</p> <p>If no “in-house” drug information or managed care specialist exists, every effort should be made to include at least one such individual in drug information–related activities.</p>
Industry	<p>Individuals who answer drug information requests in this setting should have at least 1 year of specialized drug information residency training.</p> <p>Drug information specialists within the medical communications department in industry settings should collaborate with individuals within other areas to ensure that all product materials and programs are medically accurate.</p>
Medical writing	<p>Drug information specialists should only be medical writers if appropriately medically trained.</p> <p>Specialists should be considered to complete or assist in medical writing tasks.</p>
Informatics	<p>Drug information specialists should collaborate with informaticists to develop useful health care applications.</p>

Note. ACCP = American College of Clinical Pharmacy; CPOE = computerized physician order entry; DI PRN = Drug Information Practice and Research Network; DIC = drug information center.

United States reached an apex in 1986 ($n = 127$).⁵ However, other survey data reported continued growth in the number of formalized DICs until the early 1990s.⁶ Since that time, the number of operational DICs, particularly long-established university-based centers, has been on the decline. In the last DIC status survey, only 75 formal DICs were still operational.⁷ This significant decrease is more than likely due to a confluence of factors, including widespread availability of electronic medication information resources, changes in pharmacy practice and education, and alterations in funding sources.

Not only has the number of existing DICs decreased, but the types of services provided have also undergone a transformation. An increasing number of DICs have expanded, or plan to expand, into a variety of fee-for-service activities.⁸ These activities are varied and may include providing formulary reviews and pharmacy and therapeutics (P & T) committee support, database development, conducting training programs for pharmaceutical sales representatives and medical science liaisons, medical writing projects, academic detailing, advisory board and consensus conference development, and provision of drug information and literature evaluation courses.^{8,9}

Beyond DICs themselves, the role of drug information specialists has expanded and specialists can now be found in a variety of settings (Table 1). Specialists are often involved in drug information activities that overlap with other pharmacists and health care professionals; however, their advanced training and expertise allows them to more efficiently retrieve, evaluate, and disseminate medication information. In 2009, the American College of Clinical Pharmacy (ACCP) Drug Information Practice and Research Network (DI PRN) published an opinion paper on drug information education and practice.¹ Within this opinion paper, the members of the ACCP DI PRN provided recommendations for the practice of drug information in various settings. As noted within the recommendations, there is an increasing push for extensive postgraduate training for drug information specialists.

In summary, DICs and drug information specialists continue to evolve. Many formal DICs have closed over the past decade, and those that are currently in existence are looking for ways to expand services; however, expansion efforts are

often challenging. Gaining initial access to potential clients for drug information services, recruiting appropriately trained drug information specialists, and thinking creatively to develop services that potential clients may not have even considered are all potential barriers to expansion. In addition, with the decline in formal DICs, drug information specialists have begun to take footholds in other areas including medication policy, medication safety, and informatics.

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