SPECIAL ISSUE

Providing Linguistically Appropriate Services to Persons With Limited English Proficiency: A Needs and Resources Investigation

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Increasing numbers of persons in the United States cannot speak, read, write, or understand the English language at a level that permits them to interact effectively. These limitations can hamper encounters between patients and healthcare providers, often leading to misunderstandings as to diagnosis and treatment, which in turn may result in poor patient compliance, unsatisfactory outcomes, and increased costs, A questionnaire was developed and distributed to clinical practice managers at the University of Maryland School of Medicine to assess the needs for language interpretation services and resources among clinical faculty providing healthcare to persons with limited English proficiency (LEP). Literature review, search of key Web sites, and consultation with national experts on issues pertaining to language access, health services, and reimbursement strategies also were done. Then, recommendations regarding the costs and benefits of language interpretation in healthcare settings were developed. Because recipients of federal financial assistance from the Department of Health and Human Services must provide meaningful access to persons with LEP at no cost to the client, there are clear benefits to providing language interpretation. Providers and managers should be made aware of interpretation service options and cost-saving strategies. (Am J Manag Care. 2004;10:SP29-SP36)

rowing numbers of persons in the United States have limited English proficiency (LEP). These persons "do not speak English as their primary language and...have a limited ability to read, write, speak, or understand English."¹ According to Census 2000, more than 31 million foreign-born residents live in the United States (11.1% of the total population),² and 47 million residents speak a language other than English in the home (17.9% of the population over age 5 years).³ Furthermore, 21.3 million residents over age 5 years (8.1%) speak English less than "very well."⁴

In the state of Maryland, figures from Census 2000 indicate that more than 600 000 residents speak a language other than English in the home, with almost a quarter of a million of those speaking English less than "very well."⁵ A survey of state departments, boards, commissions, task forces, and independent agencies in Maryland, conducted in 2001 by the National Foreign Language Center at the University of Maryland,⁶ found Spanish to be the language most commonly encountered (reported by 62% of entities surveyed), with Russian (24%) and Korean (22%) the next most commonly encountered languages. A 2000 survey of service providers done for the Baltimore City Health Department found that the services for an ever-increasing population of Hispanic clients were culturally and linguistically inadequate.⁷

This paper has 2 purposes: (1) to review the literature and relevant national and state policies regarding provision of language interpretation services to LEP persons in healthcare settings; and (2) to describe a needs and resources assessment of language interpretation services for patients presenting to clinical faculty at a public medical school in the mid-Atlantic region.



The University of Maryland did not participate in the above-mentioned National Foreign Language Center survey of state agencies and programs nor in the Baltimore City Health Department survey of service providers. To fully assess the existing situation, we needed detailed data on the delivery of services to LEP persons presenting to the University of Maryland Medical School faculty. These data included an estimate of the number of LEP persons presenting to clinical faculty at the University of Maryland and their linguistic/cultural background. In addition, it was important to survey clinical practice managers at the University of Maryland School of Medicine to ascertain their perceived needs for providing language services to LEP persons presenting to them, discover what linguistic/cultural groups they encounter, and find out how the attendant cultural and linguistic issues are currently being dealt with. Reviews were needed of (1) intake and other registration forms for clients presenting to University of Maryland Medical School faculty to determine how and when data on race,

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ethnicity, and language are being collected; (2) the state of knowledge about the costs and benefits of language interpretation in healthcare settings; and (3) reimbursement policies of public health insurance programs for the provision of interpretation and translation services to LEP persons.

We developed a questionnaire to assess the need at the University of Maryland School of Medicine (in terms of LEP persons presenting to clinical faculty at the School of Medicine) as well as currently available resources to surmount the attendant cultural and linguistic barriers. The questionnaire was developed for practice managers, focusing on their knowledge of the numbers of LEP patients seen in the clinics and programs, what languages and cultures are represented, and how these patients are handled. The questionnaire was submitted to the institutional review board of the University of Maryland and received exempt status.

National experts on cultural competency, language access, and health services research were consulted regarding the draft materials, the project's approach, and relevant literature. Advice was solicited about locating literature on the costs and benefits of providing language services, locating gray literature (ie, foreign or domestic open source material that usually is available through specialized channels and may not enter normal channels or systems of publication, distribution, bibliographic control, or acquisition by booksellers or subscription agents) on cultural competency and language access, and how best to handle human-subject issues. After these consultations, the materials were revised and the institutional review board exemption request was finalized.

A computerized literature search was performed using MEDLINE, the Social Sciences Citation Index, the Science Citation Index, and Dissertation Abstracts with the keywords and phrases "culture," "multicultural issues in medical school curriculum/education," "crosscultural communication," and "translators/interpreters in medical settings." A list of 167 possibly pertinent abstracts was developed. Further searching using 16 key articles and looking for others that cited those articles resulted in another 218 abstracts. In addition, 14 potentially pertinent dissertation abstracts were identified.

Out of the initial 385 abstracts, we obtained full-text articles for the abstracts that were identified as potentially the most useful. We primarily focused on cost-benefit and liability issues, as these are generally key factors that must be taken into account when any kind of institutional change is under consideration. We also sought studies conducted using objective outcome measures.

The literature review included a review of realistic options for improving language access in healthcare

facilities; these are described on the Office for Civil Rights Web site (http://www.hhs.gov/ocr/lep/). Various articles also have been published occasionally in medical management journals regarding medical liability cases related to LEP, for which we sought the full text.

Finally, full text of 2 dissertations was obtained. The first details the organizational change and decision making that led to the creation of interpreter services at selected healthcare organizations in the United States and Canada.⁸ The second offers a cost-benefit analysis of providing interpreter services in healthcare settings.⁹

RESULTS

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The Benefits of Medical Interpretation

It is difficult to communicate effectively when there are linguistic or cultural barriers between clients and providers. Limitations in spoken and written language comprehension hamper encounters between patients and healthcare providers, often leading to misunderstandings concerning diagnosis and treatment, which in turn may result in poor patient compliance and unsatisfactory outcomes.

Studies have shown that overcoming language discordance between patients and providers leads to increased compliance with medications¹⁰ and appointments,^{10,11} fewer emergency department (ED) visits,^{10,11} better recall of information discussed during the encounter,^{12,13} and more questions being asked.¹² In addition, there is evidence that using interpreters increases the delivery of healthcare services (office visits, prescriptions written and filled, rectal examinations, fecal occult blood testing, and influenza immunizations).¹⁴

Patient surveys conducted after ED visits have revealed increased satisfaction associated with language-concordant encounters^{15,16}; better-informed patients are more satisfied, and may also be more compliant.¹² In a study of physical and psychological wellbeing in patients with hypertension or diabetes, Pérez-Stable et al found that having a language-concordant physician was significantly associated with better functioning on all 4 overall health-status scales and on 6 of 10 subscales.¹⁷

Barriers in communication affect healthcare providers as well. Some physicians who cannot fully understand their patients appear to compensate for the unaccustomed lack of information by altering their management to a more cautious, conservative style. Some studies have shown that when language barriers are present, more tests are ordered^{18,19}; in addition, more intravenous hydration is ordered and there are more frequent hospital admissions.¹⁹ This phenomenon has been termed a "language-barrier premium."¹⁹

Informed consent also must be considered in the context of barriers to communication. In Western medical practice, it is believed that patients have a right to be fully informed about their condition and treatment options to participate in the decision-making process regarding their care. In the case of LEP patients, of course, this consent will not be truly "informed" unless appropriate interpretation services are available to them. Informed consent is an ethical obligation fundamental to the physician-patient relationship,²⁰ and has potential legal ramifications as well.

The risk of medical malpractice occurring due to language discordance between providers and patients is almost certainly reduced when competent medical interpretation is provided, and should be taken into consideration when weighing the costs and benefits of interpreter services, as the costs of malpractice can be quite high when an adverse event occurs. Although medical liability lawsuits are most commonly settled out of court and the terms of the settlements are not revealed, a few published reports detail the circumstances leading to a medical mishap related to the presence of language barriers and the amount awarded to the plaintiff. One such case hinged on a single word, intoxicado, the misinterpretation of which by non-Spanish-speaking care providers led to a sequence of events that culminated in quadriplegia for the patient and, subsequently, a settlement totaling \$71 million.²¹ In another case, a patient's eye injury was inappropriately treated due to inadequate interpretation (via telephone, and the patient never spoke directly to the interpreter). The patient suffered a permanent impairment of vision in that eye, and the case went to trial with an ultimate verdict for the plaintiff of \$350,000.²²

Legal Requirements

In recent years, the federal government has recognized the barriers that can be created by language discordance between providers and clients, and has articulated the responsibilities of service providers towards LEP clients. These responsibilities have a legal basis in Title VI of the Civil Rights Act of 1964, which states in part that "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."²³ US Department of Health and Human Services (HHS) regulations require all recipients of federal financial assistance from HHS to provide meaningful access for LEP persons, at no cost to the client.²⁴ Pursuant to this, guidelines have been published by the Office for Civil Rights of HHS (revised final guidance published in August 2003) that elaborate on what constitutes "meaningful access" for patients with LEP.¹ In addition, the HHS Office of Minority Health published national standards for culturally and linguistically appropriate services (CLAS) in healthcare in the *Federal Register* in December 2000,²⁵ encompassing CLAS mandates (based on the federal requirements for recipients of federal funds), guidelines (activities recommended for adoption as mandates), and recommendations. Accreditation of hospitals and medical schools will be based in part on adherence to these regulations and guidelines.

The state of Maryland passed its own law in 2002 requiring "each State department, agency, or program ... [to] take reasonable steps to provide equal access to public services for individuals with limited English proficiency," achieving that goal by "the provision of oral language services for individuals with limited English proficiency" and "the translation of vital documents ordinarily provided to the public into any language spoken by any limited English proficient population that constitutes 3% of the overall population within the geographic area served by a local office of a State program as measured by the United States Census" as well as "any additional methods or means necessary to achieve equal access to public services."²⁶

Approaches to Interpreter Services

Interpretation can be provided for LEP patients in a variety of ways. The alternatives include using family members or friends, community language banks, telephone interpreters, contracted interpreters, bilingual staff, and on-staff salaried interpreters. There are pros and cons associated with each of these modalities.^{27,28} The cost of providing interpreter services also varies widely, depending upon the specific situation of the institution and the kinds of services that are appropriate. The Office of Management and Budget, in its 2002 report to Congress on the total benefits and costs of providing interpreter services for persons with limited English proficiency, estimated that there would be an overall increased cost of about \$4 per patient encounter, which represents a "premium" of 0.5% (based on an average cost of \$856 per visit).²⁹

Family Members or Friends. Family members or friends are readily available, often accompanying the patient to the medical encounter and expecting to need to interpret. However, as mentioned above, the quality of interpretation is frequently inadequate and can lead to misunderstandings and misdiagnoses. Confidentiality is difficult to maintain in this situation, and patients may not be as forthcoming about certain problems or

symptoms as they might be in the presence of a neutral interpreter. There may be conflicts of interest in certain situations. Children often are asked to interpret, which can be distressing for both child and parent, as well as compounding the problem of inadequate vocabulary.

Community Language Banks. Community language banks usually have volunteers who are willing to come in to help out with specific language needs. These volunteers usually have good understanding of both the culture of the provider and the patient, and may have been highly educated professionals in their own country. However, these persons often are not available when they are needed; and depending on the size of the community, confidentiality may be a problem. Interpretation quality can a problem with this group as well, as these individuals are mostly untrained. However, with the provision of adequate training, community banks of interpreters can be a great help, particularly for less commonly encountered languages.

Telephone Interpreters. Telephone interpreters now are available from various services, and can generally be reached at any time of day or night to provide interpretation for virtually any language requested. Some services may require an on-going contract with a monthly fee, as well as payment for the actual interpreting time. Unfortunately, because the interpreter is not present in the room with the patient, all of the visual cues that go into communication are lost, and the telephone interpreter may miss something (eg, gestures or facial expressions indicating hesitation, lack of understanding, anxiety) that someone face-to-face with the patient would be able to pick up on. Still, some assert that trained, experienced telephone interpreters are in fact able to decode nonverbal cues from a person's tone of voice alone.³⁰ As previously mentioned, however, there are no national standards yet for healthcare interpretation; thus, the education, training, and competency of these interpreters may vary widely.

The kind of equipment used is also a factor in the acceptance of telephone interpreting. Passing a telephone back and forth during the medical interview can be an awkward process, and even dual handsets can be a problem during the examination phase of the encounter. Speaker phones have been used with some success, depending on the quality of the acoustics, but their use in open areas may violate patients' privacy. "Remote-simultaneous" interpretation (using headsets for patient and provider, with the interpreter at a remote location providing simultaneous interpretation) was preferred over "proximate-consecutive" interpretation (interpreter present in the examining room with the patient and provider, repeating what each says in the other's language) in a study conducted during well-

baby visits; using the former, there were 10% more utterances by physicians and 28% more by mothers, with significantly more questions asked by mothers. Perhaps surprisingly, there were fewer errors using remote-simultaneous interpretation; and both providers and mothers preferred the remote-simultaneous modality over proximate-consecutive, although the interpreters preferred to be in the room with the participants.³¹

The 2002 Office of Management and Budget report estimated the average cost for telephone interpreting services at \$132 per hour (ie, \$2.20/minute).²⁹ The state of Maryland has a contract for interpreter services with Language Link, which costs \$1.65 per minute for telephone interpretation and \$60 per hour for on-site interpretation.³² Maryland district courts and the Maryland Automotive Insurance Fund both use Language Learning Enterprises (LLE-*LINK*[®]), which has a published list price of \$1.85 per minute.

Contracted Interpreters. Contracted interpreters are professional interpreters who work freelance or through an agency. These interpreters are present in the room with the patient and provider, repeating what each says in the other's language; thus, the encounter will likely take longer than it would for language-concordant participants. The competency of these interpreters, like that of telephone interpreters, varies greatly. Additionally, there may be delays in service if the interpreter needs to travel to the encounter, especially if there is no tracking system that flags patient's charts to pre-arrange for services. Payment may include travel time for the interpreter as well as actual time spent interpreting. The cost of contracting outside interpreters also is quite variable, depending on the area of the country, whether or not the interpreters are contracted directly or through an agency, and the nature of the contract. Recent reports on the costs of professional interpretation quote rates ranging from \$12 to \$50 per hour.^{8,33} Language banks of interpreters, run by nonprofit organizations in some urban areas, charge an average of \$20 per hour.29

Bilingual Staff. Bilingual staff are healthcare staff or support staff who are called away from their regular duties to act temporarily as interpreters when the need arises. The fact that they are part of the institution, usually working with specific clinics or programs, means that they often know the healthcare team well and are likely to be familiar with the terminology in that field. However, they are inconsistently available, and it may be stressful for them, causing inconvenience or even more serious problems when they are interrupted in their regular duties. In addition, these interpreters generally fall into the ad hoc category, with little or no training in the performance of interpreting or the ethics involved. However, if they are tested for level of skill in both languages and supported with training, if their additional duties are acknowledged with salary increases or bonuses, and if arrangements can be made for the time taken away from their other work, these persons can be a valuable resource within an institution. Bilingual staff who act as interpreters may be offered increased compensation in the form of per-hour pay differentials, monthly bonuses, paid overtime, free meal tickets, or a certain percent higher salary.³⁴

On-staff Salaried Interpreters. On-staff salaried interpreters are trained, professional interpreters who are regularly available to interpret in the most commonly encountered languages. Rapport and trust with clients and providers can be established over time, greatly facilitating the communication process. However, for languages that are rarely encountered, this is not a feasible option. Hourly wages for full-time staff interpreters have been reported to range from \$10 to \$32 per hour.^{19,34}

Reimbursement for Interpreter Services

Various sources of funding exist to offset the costs of oral interpretation services. Matching federal funds are available through Medicaid and the State Children's Health Insurance Program (SCHIP),³⁵ although Maryland is not one of the states currently availing themselves of these funds. The level of federal reimbursement varies from state to state: Maryland's reimbursement rate (for federal fiscal year [FY] 2004 and FY 2005) is 53% for Medicaid-covered services and 50% for administrative expenses; for SCHIP it is 65%.³⁶

As of July 2003, 9 states offered direct reimbursement for the costs of language interpreters: Idaho, Hawaii, Maine, Massachusetts, Minnesota, Montana, New Hampshire, Utah, and Washington.37 These states each have set up their own reimbursement systems: some contract with language agencies, some reimburse providers who screen and hire interpreters, some reimburse interpreters directly, and one state enrolls the interpreters as Medicaid providers. Reimbursement rates vary from \$7 to \$50 per hour.³⁷ "The varied mechanisms illustrate the flexibility each state has to design a reimbursement mechanism that fits its needs, budget and resources. The costs vary, but each state draws down a minimum of 50% of its costs from the federal government through Medicaid and SCHIP (although states' administrative expenses in SCHIP are limited to 10% of their allotment)."37

Hospitals serving high proportions of LEP patients may be able to obtain funds through their designation as "disproportionate share hospitals" (serving a disproportionate share of Medicaid and uninsured patients). It is possible that expenses for providing interpreter services could be considered in determining the amount of disproportionate-share-hospital funding to be allocated to such hospitals.

Managed care organizations in Maryland (which are a part of Maryland's HealthChoice program) are under contract to provide language interpretation for their LEP enrollees³⁸ as well as written materials "in the enrollee's native tongue if the enrollee is a member of a substantial minority."³⁹ The major private insurers in the state of Maryland, including CareFirst (Blue Cross Blue Shield of Maryland, the largest health insurer in the state), Mid Atlantic Medical Services, LLC (MAMSI), and United Healthcare, do not cover interpreter services.

Language Interpretation Needs and Resources at the University of Maryland Medical Center

There was a low response rate to the practice manager questionnaire (7 of 20 were returned). However, the questionnaires that were returned indicated a general lack of awareness of the availability of oral interpreter services at the University of Maryland (which was what had initially prompted this investigation). One questionnaire did mention obtaining "interpreters from UMMS" (University of Maryland Medical Systems); and we discovered that there is, in fact, a system in place for obtaining oral interpreters (as well as sign language interpreters) through the Patient Representative Department.

An interview with the manager of interpreter services at UMMS revealed that the interpreter service program was established in 1988, a formal policy on requesting interpreter services does exist, and UMMS currently has contracts with 2 outside agencies for interpreters, one primarily for oral interpretation and the other primarily for sign language interpretation.

To obtain an interpreter at UMMS, a call is made either to the hospital telephone operators or directly to the manager of interpreter services, and they in turn contact the appropriate agency to make the request. Requests can be made at the last minute, but 24-hour notice is preferred. Overhead paging for on-the-spot language help is sometimes used when an interpreter is needed immediately and the person making the request does not feel they can wait for an interpreter to arrive. There also is a volunteer language bank, made up of outside (ie, nonstaff) or staff volunteers, but that list is rarely used because outside volunteers can seldom come in right away, and it is "very inconvenient" for staff-either they're not available or can only come in a couple of hours and then only stay for 10 minutes, and so forth.

Information on how to obtain interpreters is provided to each UMMS unit. The head nurse or social worker for each unit usually is the person who makes the call for an interpreter. The interpreter-services manager also inserts an occasional article about the interpreting service in the UMMS newsletter. In general, each unit does its own training of new personnel, including provision of information about the availability of interpreters and how to obtain them; however, once a year or "as needed" (eg, when there are a lot of new personnel), a unit may request that the interpreter-services manager give a presentation on the interpreting service. The agency that provides the language interpreters also is available to train hospital personnel on using interpreters.

Telephone interpretation under the current contract costs \$2.10 per minute for Spanish and \$2.30 per minute for all other languages. For on-site interpretation, there is a 2-hour minimum, and rates range from \$70 to \$95 per hour, depending on the language and the time of day (there is a surcharge for nights and weekends). On-site fees also include \$35 per hour for travel, parking, and tolls.

The funding for the interpreting services comes out of the Patient Representative Department's budget. Although the number of interpreter requests appears to be rising (447 LEP patients in FY 2002 and 650 LEP patients in FY 2003 were provided with interpreters), the budget allotted is not keeping pace. In FY 2003, \$250 000 was allocated for interpreters (both sign language and oral), but \$385 000 was spent on oral interpretation alone and another \$300 000 was spent on sign language interpretation for a total deficit of \$435 000. The primary languages requested are Spanish (450 requests in FY 2003), Korean, and Vietnamese and Cantonese (roughly equal numbers of requests for each of the latter 3 languages).

The Spanish-speaking patients who come in from the Eastern Shore of Maryland are assigned a case manager, and once they are established in a clinic, their clinic chart is flagged with a post-it note (there is no designated space for this on chart forms) as being that of a patient needing an interpreter. On the patient intake form for the hospital, there is a very small blank for "place of birth" but not "language." The form also has a blank for "race" and is filled in (by the patient) with W (white), B (black), A (Asian), H (Hispanic) or O (other).

The importance of an established interpreter service program at a large medical center such as the University of Maryland Medical Center is underscored by findings of a 2003 follow-up study of the Baltimore City Health Department survey of service providers conducted in 2000. The 2003 follow-up study revealed a substantial growth in the number of LEP Hispanic clients accessing services in Baltimore.

DISCUSSION

Despite formidable advances in medical technology, good communication remains the cornerstone of the practice of medicine. Indeed, over the past decade there has been a resurgence of interest in the dialogue between patients and their healthcare providers—socalled "narrative medicine"—an acknowledgement of the belief among medical practitioners that even today, almost 90% of the diagnosis still resides in the story the patient tells.^{40,41} This belief is supported by the demonstrated benefits of providing language interpretation for LEP clients in healthcare settings: there are higher rates of patient satisfaction,^{15,16} increased compliance with appointments^{10,11} and medications,¹⁰ and overall better scores on health-status scales¹⁷ when the language barriers between patients and their providers are overcome.

The issues involved in providing linguistically appropriate services to LEP persons are complex. However, they must be addressed, not only for moral and ethical reasons, but also to comply with federal regulations for the recipients of federal funds²³ and to reduce medical malpractice risks. Healthcare providers and managers should be made aware of interpretation service options and cost-saving strategies.

Clinical practices should be encouraged to periodically assess their needs and resources for interpretation services. Data on language should be collected; space for that information should be added to intake forms if it does not already exist.

Because there always is turnover among practitioners and staff, there should be routine training regarding resources for interpretation services. Including the pertinent information in any "welcome package" for new faculty and staff would be helpful. That information should include a clear statement of the institution's policy regarding when an interpreter should be called for, and under what circumstances (examination, informed consent, treatment) it is inappropriate to proceed without an interpreter present. Development of formal training in the use of interpreters and cultural-competency issues will likely further enhance interpreter use and the quality of the interpreted medical encounter. (The cultural aspects of healthcare communication were not within the scope of this initial, limited review, and therefore have not been discussed here, although they are equally important and certainly intimately associated with the language issues.)

In addition to having appropriate interpretation services available, it is important to make clients aware that language barriers are being addressed. There should be readily visible signage in the most commonly encountered languages indicating the availability of interpretation, as well as "I speak" cards (a set of cards with "I speak" in a variety of languages on one side and the English translation on the other, so that patients can select their primary language and appropriate arrangements can be made).⁴² Furthermore, the most commonly used documents (eg, intake and other administrative forms, informed consent documents) should be professionally translated into the languages most commonly encountered.

Budgetary constraints dictate close attention to the types of services that are offered and usage rates to determine the most cost-effective strategies for the institution. In any budget discussion, it should be recognized that there are costs associated with *not* providing language interpretation (eg, potential liability, unnecessary tests and procedures, inappropriate use of the ED, poor management of chronic conditions, decreased patient compliance).

Procedures should be established for evaluating the provision of interpreter services. Some questions that might be worth asking include the following:

- Are charts flagged to indicate patients who will need interpreters?
- Are all those who need interpreters getting them (and how is this known)?
- How long does it take for interpreters to arrive, on average?
- How often does the medical encounter take place without an interpreter (and why)?
- Are patient satisfaction surveys being done to get patients' perspectives on the interpreted encounters?

Promoting the hiring and appropriate use of bilingual staff is another potential solution. Flagging charts of patients with language-interpreter needs so that each unit could assess its interpreting needs would assist in bilingual hiring considerations.

Also useful is collaboration with community-based organizations and associations to do the needs and resource assessments, identify actions that can be taken, and implement those plans. Healthcare providers should work with state agencies to ensure compliance with existing regulations governing funding and access to interpretation services (eg, Medicaid managed care organizations).

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