information at a stressful time, so being informed about where and how to access more information was seen as important.

Nowadays, genetics is rarely out of the media for long. Reports of gene discoveries and new treatments can be reported with more enthusiasm than accuracy, raising expectations about the availability and scope of genetic tests and cures.

Consumer genetic testing is available via the internet. Private companies will provide a genetic profile for a large range of conditions and characteristics. Nurses need to be able to evaluate such reports and manage patient expectations accordingly. For this, their own education in genetics/genomics is essential.

EDUCATION
The knowledge, skills and attitudes in genetics that UK nurses need to support patients and address their concerns are set out in an education framework based on seven competences (Kirk et al, 2003; Box 6). Competences for US nurses have also been developed (Jenkins and Calzone, 2007).

The UK education framework is intended to guide pre-registration curricula in particular and forms a platform on which to develop knowledge and skills that qualified nurses need in their field of practice. In relation to this, and to inform the Knowledge and Skills Framework, the NHS National Genetics Education and Development Centre and Skills for Health (2007) have described nine genetics activities for healthcare staff outside the specialty of genetics, to support the patient pathway. These were accepted as national occupational standards in 2007. Not all the competences apply to all healthcare professional roles (Fig 2).

The NHS National Genetics Education and Development Centre was established in 2004 to support educators and practitioners as they look to integrate genomic healthcare into practice. It works with a network of genetic education facilitators to advise on education and training approaches, and to develop education resources.

NURSING LEADERSHIP IN GENOMIC HEALTHCARE
Nursing professionals have been notably active in leading change in genetics education and practice in healthcare. The International Society of Nurses in Genetics represents nurses from countries all over the world and has been a strong voice in influencing policy. National organisations such as the AGNC have sought to raise awareness of the contribution that nurses can make in genetic healthcare.

CONCLUSION
The scope and potential of genomic healthcare has major implications for practice and brings its own set of challenges. Nurses are well placed to integrate these advances into practice to benefit patients, and must have adequate preparation to ensure they have the necessary knowledge, skills and awareness of the possible ethical issues.

An online question and answer resource on the role of genetics and genomics in health and disease is now available on nursingtimes.net. The resource has been set out to reflect the patient pathway with examples of questions that nurses might be asked. The resource is available at tinyurl.com/genetics-resource

REFERENCES