



BSI Standards Publication

Health informatics — Standardizing graphical content

National foreword

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Foreword

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This document was prepared by Technical Committee ISO/TC 215, *Health informatics*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Images and graphics predate any formal written human communication. Cave paintings and engravings have given pointers to lifestyles and methods from ancient times. Pictograms describing health problems have been found as engravings and drawings in the Egyptian pyramids (approximately 2 500 BC), the frescoes and road signs in Pompei (approximately 1st century AD) and the murals in the ancient temples of India such as Konark Sun Temple (1 250 AD). They have helped retrace the history of medicine and given an idea of health problems existing in those times. More importantly, their usage transcended language barriers.

Healthcare needs are universal. The health information technology sector depends on accurate and consistent transfer of information relevant to the health care providers and their patients. The focus is on finding convenient and universally understood methods for information transfer. In this context, graphics usage in the form of emojis, emoticons and stickers has become an indispensable tool in enhancing online communications and making it richer and more emotive. Healthcare applications are also adopting graphics, but their usage is still less prevalent than in other fields. One of the major reasons behind this is the lack of standardization in this field. This document attempts to stimulate interest, emphasize the need, and suggest ways for better usage of graphics in healthcare information technology.

With rising life expectancy, along with higher incidence of non-communicable diseases (NCDs), there is a constant need for care support. Advances in telecommunication have allowed this to be offered remotely through telehealth systems. Even before the COVID period, 76 % of US citizens preferred remote care over a physical visit^[19].

Telehealth has spurred the need for interoperability standards. Telehealth usage increased exponentially globally following the COVID pandemic. With global warming and related environmental issues, the frequency of other natural disasters has increased. During disasters, the need for remote support increases the interchange of health-related communication, even among communities and people who have never met before. Improved travel facilities have given rise to tourism, and especially medical tourism. Migration is also a rising phenomenon. Both medical tourism and migration increase the possibility of language and cultural differences between the care provider and the patient. Thus, methods to easily transfer health information across platforms and language barriers can help achieve consistent and uniform delivery of care.

Graphics and visually relatable content, for example locating injuries or pain with additional on-the-spot markings, have been long used for medical record keeping. However, these are not yet standardized.

This document extrapolates the need and current status of health-related graphics standardization.

Likely beneficiaries of this document include:

- application developers;
- telehealth solution providers;
- those working in the social media workspace;
- those working with terminologies;
- clinicians and other users of applications;
- informaticians, analysts and researchers working in the field of health information.

