

# Colour tagging of medical records and age–sex cards

J.H. NIGHTINGALE, MB, MRCP  
General Practitioner, Southampton

R.J. WALTON, BSc, MB, DPhil, MRCP  
General Practitioner, Southampton

**SUMMARY.** *The colour tagging of medical records and age–sex cards is described. The system of eight colour tags originally recommended by the Royal College of General Practitioners was used as a basis but was modified and the number of colour tags extended to 13. These tags were applied to medical records and age–sex cards. The colour-coded age–sex registers thus serve as effective chronic morbidity and at-risk registers.*

## Introduction

IN 1977, as part of preparations for moving to a health centre, a partnership of five principals, with a total list of approximately 10 000 patients, decided to construct age–sex registers for each doctor and to colour tag medical record folders (FP6) and age–sex cards (ASR2a) to form chronic morbidity and at-risk registers. The recommendations of the Royal College of General Practitioners were studied (Table 1)<sup>1,2</sup> and it was concluded that the system could usefully be modified and expanded. This idea was made possible because the ASR2a age–sex cards<sup>3</sup> — originally developed by the Birmingham Research Unit of the Royal College of General Practitioners for use in conjunction with the 'E book'<sup>4</sup> — were printed with sufficient space on the backs for 12 colour tags.

## Description of system

The expanded system of colour tags has been used virtually unaltered in this practice for the past seven years and is shown in Table 2. Most of the tags recommended by the College have been retained but the use of some of them has been changed. The red tag indicating drug sensitivities was retained for application to the medical records but it was decided not to include it in the colour-coding of the age–sex cards. The diabetes (brown), epilepsy (yellow), hypertension (blue), long-term maintenance therapy (white) and attempted suicide (black) tags were all retained. The tuberculosis (green) tag was felt to be out of date because new and recurrent cases of tuberculosis are now rare. Instead patients with tuberculosis were included in the at-risk group (described later). The green tag was used to denote those suffering from chronic joint disease. The black and white chequered tag indicating measles was also considered to have been made redundant by the introduction of widespread immunization against the disease. This tag was used to indicate serious social problems, such as child abuse, and those aged over 75 years living alone have recently been included in this category. In addition, five other colour tags were added to the system, which was further expanded by writing abbreviated diagnoses and risks directly on the tags. Three of these colour tags were already available, free of charge, from the pharmaceutical company Winthrop who supply the other colour tags recommended by the College. The other two colours (orange and

pale yellow) were chosen for their ease of availability from local stationery suppliers. Orange was chosen for cardiovascular diseases, pink for the handicapped, light blue for chronic respiratory disease and light green for chronic psychiatric conditions, including alcoholism.

**Table 1.** RCGP recommendations for colour tagging of NHS medical records.

Colour of tag	Condition
Red	Sensitivities (drug sensitivities, severe toxic drug idiosyncrasies and major allergies)
Brown	Diabetes mellitus
Yellow	Epilepsy
Green	Tuberculosis (active, arrested or cured)
Blue	Hypertension (any variety which has warranted hypotensive therapy)
White	Long-term maintenance therapy (for example steroids, thyroid, vitamin B12 or antibiotics)
Black	Attempted suicide
Black and white chequered	Measles (to avoid unnecessary immunization procedures)

The pale yellow (at risk) tag was used in three distinct ways. First, it was used to indicate a risk of recurrence of a disease such as carcinoma, tuberculosis, nephritis, ectopic pregnancy, Crohn's disease, ulcerative colitis or duodenal ulcer. Secondly, it was used to indicate the possibility of a patient developing a disease either because of a strong family history, as with glaucoma or Huntington's chorea, or because of some relevant past event, such as large babies increasing the risk of diabetes or pelvic inflammatory disease increasing the risk of ectopic pregnancy. Also in this second group are those at increased risk of developing a disease because of an abnormal screening test result, such as an abnormal cervical smear, the accidental finding of thyroid antibodies or a positive rheumatoid factor. Thirdly, it was used to indicate miscellaneous disorders, such as haemophilia, polycythaemia or Paget's disease which are not adequately coded elsewhere within the system.

## Use of the system

The coding of the folders is done by the doctors immediately after the consultations, and the colour tags are applied to the front of the FP6 folders. A receptionist then duplicates the colour tags onto the appropriate age–sex card. The folded tags are easy to see, standing proud on the age–sex cards in their drawers. Each doctor has a complete set of colour tags, together with the code sheet as an *aide-mémoire*. In fact it was found that the colour code was easy to memorize. Periodic audit of the registers is simple and counting the colour tags is a quick process.

There is considerable scope for expansion of the sub-coding. An extensive range of abbreviations (Table 2) and also symbols are used. One doctor is particularly interested in alcoholism and has a sub-coding for this. Inconspicuous spots distinguish between those suspected of being at risk of developing the problem

**Table 2.** Revised and expanded system of colour tagging.

Colour of tag	Condition	Abbreviation
Red	<i>Sensitivities</i>	
Orange	<i>Cardiovascular disease</i>	
	Ischaemic heart disease	IHD
	Cerebrovascular accident	CVA
	Peripheral vascular disease	PVD
	Atrial fibrillation	AF
	Myocardial infarction	MI
	Congenital heart disease	CHD
Brown	<i>Diabetes mellitus</i>	
Yellow	<i>Epilepsy</i>	
Green	<i>Chronic joint disease</i>	
	Rheumatoid arthritis	RA
	Osteoarthritis	OA
	Ankylosing spondylosis	AS
	Gout	
Blue	<i>Hypertension</i>	
White	<i>Long-term maintenance therapy</i>	
	Steroids	ST
	Thyroid	TH
	Vitamin B12	B12
	Gout	GT
	Hyperlipidaemia	LIP
	Anticoagulant	A-C
	Psychiatric	PSY
Black	<i>Attempted suicide</i>	
Black and white chequered	<i>Social problems</i>	
Pink	<i>Handicapped</i>	
	Blind	
	Deaf	
	Mentally retarded	
	Physical (amputations and severe physical handicaps)	
	Colostomy	
	Ileostomy	
Pale yellow	<i>At risk</i>	
	Collagen-vascular disease	CVD
	Hypertension	BP
	Malabsorption	MAL
	Glaucoma	GL
	Tuberculosis	TB
	Carcinoma	CA
	Diabetes mellitus	DM
	Alcoholism	ALC
	Vascular disease	VASC
	Single-parent family	SPF
Light blue	<i>Chronic respiratory disease</i>	
	Asthma	
	Chronic obstructive airways disease	COAD
	Chronic bronchitis	CB
Light green	<i>Chronic psychiatric problems including alcoholism</i>	

(single spot on a pale yellow tag) and those with a known problem (single spot on a light green tag). A line under the spot means that the patient appears to have changed his habits after counselling or treatment. A non-smoking sticker helps to encourage those who have given up smoking, this being stuck in the margin of the continuation notes. A gold tag is a recent innovation to indicate those women who have had hysterectomies, thus avoiding unnecessary clerical work when selecting women

for cervical smears. The only other alteration which is planned is to introduce a colour tag to denote malignant disease, which is at present subsumed under the pale yellow category. Obviously the introduction of another colour requires some reorganization of the space on the age-sex card. This has been achieved by allowing a certain amount of doubling up to give two colours in one space.

## Discussion

Colour tagging of medical records should be part of practice strategy to improve medical records. Its great advantage is that it is a simple and cheap way of building up chronic morbidity and at-risk registers which are then available for audit, research and preventive exercises. As pointed out by Humphreys, colour coding helps in the review of existing conditions and with opportunistic health education.<sup>5</sup> In this practice the registers are used extensively for research by the five principals and trainees and medical students. Recent examples of such work include audits of patients with diabetes and gout, of frequent and infrequent attenders over the age of 75 years, and of children with asthma.

The use of the pale yellow (at risk) tag is proving more and more useful. A young woman recently presented with pelvic pain, the diagnosis of which was facilitated by the notes having a pale yellow tag and the words 'risk of ectopic pregnancy' (she had a prolonged history of pelvic inflammatory disease).

The recent publication *Classification of diseases, problems and procedures* describes how simple coding can be with modern computers.<sup>6</sup> At first sight, these advances would seem to render obsolete simpler methods of data storage such as that described here. In fact the reverse is true. The simpler it becomes to transfer data to computers, the more important it is that the data be readily available. Computer-based systems can store so much data that there is a danger of collecting trivial information and losing sight of that which is important.

It is not suggested that this code be adopted by the College but it is hoped that an interest in colour tagging may be rekindled as it has been found to be so valuable.

## References

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## Address for correspondence

Dr. J.H. Nightingale, Shirley Health Centre, Grove Road, Southampton SO9 3ZA.