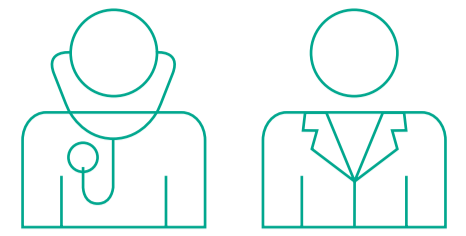


MEDICATION ERRORS IN CHEMOTHERAPY



WHAT ARE MEDICATION ERRORS

A medication error is defined as error in the

- ordering
- dispensing
- applying
- or monitoring

of a drug.¹

HOW OFTEN DO MEDICATION ERRORS OCCUR



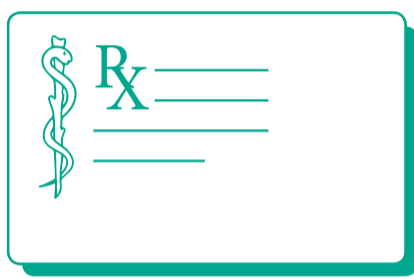
7%
of adults



19%
of children

taking chemotherapy drugs in outpatient clinics or at home were given the wrong dose or experienced other medication mistakes.²

OCCURENCE OF MEDICATION ERRORS^{3, 4}



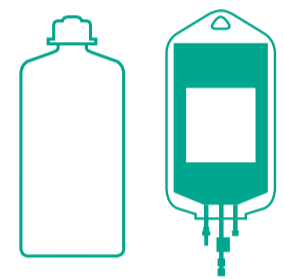
42–91%

Prescription



4–8%

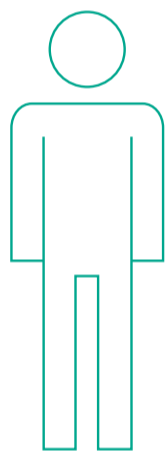
Preparation



1%

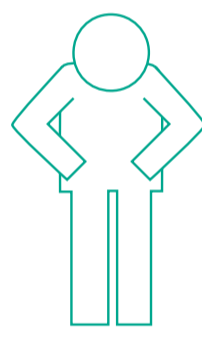
Application errors

CONSEQUENCES FOR THE PATIENT^{2, 3}



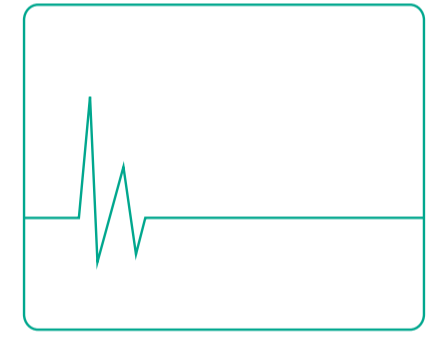
Temporary injury

(e.g. abdominal pain, neuropathy, hypertension)



Permanent damage

(diseases of the heart, lungs or nerves; infertility)



Death

(e.g. due to excessive bone marrow suppression)

According to one study, the vast majority of errors (436 out of 449) were intercepted before medication reached the patients. But:

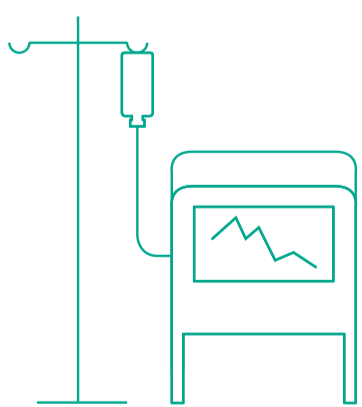
13.4% of avoided errors would have resulted in temporary injury.

2.6% would have resulted in permanent damage.

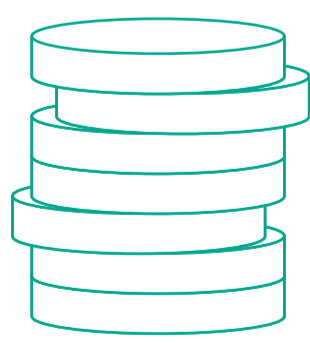
2.6% would have compromised the vital prognosis of the patient.

Overall, 13 medication errors reached the patient without causing damage, although two patients required enhanced monitoring.

CONSEQUENCES FOR THE HOSPITAL³



216
additional days



€92,907
estimated total

Another study showed that medication errors lead to 216 additional days of hospitalisation and cost an estimated total of €92,907 per year.

IN GENERAL

Of all the drugs implicated in medication errors, antineoplastic drugs are the most commonly involved (52%).⁵

Sources:
1 Walsh K E et al, JCO 2009;27:891–896.
2 WebMD Health News, (2008), Drug Errors Common in Chemo Treatments, Hendruck, B., Retrieved from <https://www.webmd.com/cancer/news/20081231/dru-errors-common-in-chemo-treatments#1>.
3 Ranchon F et al, BMC Cancer 2011; 11: 478.
4 Watts R G et al, Pediatr Blood Cancer 2013;60:1320–1324.
5 Banasser G et al, Pa Patient Saf Advis 2017; 14 (4).