to stroke care and the chain of recovery includes emergency call centre, stroke triages, emergency medical services (EMS), emergency rooms (ER), stroke units (SU), rehabilitation hospitals and community health care. Thrombolysis is a recent breakthrough in the treatment of acute stroke. The official register of stroke thrombolysis in European Union, SITS-MOST, verified that thrombolysis in routine clinical practice is at least as safe and effective as in randomised clinical trials (RCT). Based on the SITS-MOST -register the Department of Neurology of Helsinki University Central Hospital (HUCH) provides more stroke thrombolysis than any other European hospital. The register also reveals that more stroke patients per 1,000,000 inhabitants receive thrombolysis in Finland than in any other EU member country and that the outcome of the patients is good. While thrombolysis only suits for selected patients, stroke unit care is beneficial for all of them. Patient care in a stroke unit reduces short-term and long-term mortality rates, the need for institutional long-term care and functional dependency. Patients receiving care in dedicated stroke units have a reduced risk of death, a shorter hospital stay and increased likelihood of living at home compared with stroke patients treated in general medical wards. European experts have reached a good level of agreement on what are the necessary components for primary stroke centres (PSC), comprehensive stroke centres (CSC) and any hospital ward (AHW) treating acute stroke patients. A randomly selected sample of 886 European hospitals admitting acute stroke patients revealed that in Finland, Luxemburg, the Netherlands and Sweden such patients have the highest likelihood to be treated in hospitals capable for modern stroke care. Finland has a long track record of national recommendations for stroke management. Such recommendations improve the quality of care in a cost-effective way. No system can replace the individual initiative, creativity and insight that lead to great discoveries, but progress is not made by breakthroughs alone. By working together it is possible to make a difference. Experiences achieved in Helsinki and nationwide in whole Finland demonstrate that hard work pays back.

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Management of blood pressure in acute stroke

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High blood pressure (BP) is present in 80% of acute stroke patients, whether of ischaemic or haemorrhagic type, and is independently associated with poor outcome. However, BP is not routinely altered immediate post stroke due to concerns about dysfunctional cerebral autoregulation.

Several small trials have assessed the effect of BP lowering in acute ischaemic stroke. Calcium channel blockers did not alter outcome after ischaemic stroke (29 trials, 7665 patients) but some studies, especially those testing intravenous formulations, reported hazard. The BEST trials showed a trend towards increased death and disability with ß-receptor antagonists.

A small trial of candesartan (ACCESS, n=339) found that this angiotensin receptor antagonist reduced the combined outcome of cerebral and cardiac vascular events, but not functional outcome, in patient with recent ischaemic stroke.

Recently, the INTERACT trial studied 400 patients with primary intracerebral haemorrhage and reported that BP lowering (with the intervention chosen by the local recruiting centre) non-significantly reduced haematoma expansion; no effect on functional outcome was observed. The CHHIPS trial (which closed early after recruiting 179 patients) showed that BP could be lowered in acute ischaemic stroke; although no effect on functional outcome was seen, death was reduced (p=0.05).

There are two large ongoing trials examining the question of lowering BP in acute stroke. ENOS is assessing the effect of transdermal glyceryl trinitrate and has currently recruited 868 patients (www.enos.ac.uk). The SCAST trial is examining oral candesartan.