



Robson classification

Euro-Persitat Meeting

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Béatrice Blondel, Jennifer Zeitlin

History

- Definition in 2001 by Michael Robson, Dublin
- Few studies with this classification in the 2000's
- Many studies (and reviews!) afterwards at national level, in hospitals, for analyses of time trends, comparisons between units or assessment of national policies
 - Studies from the EURO PERISTAT countries: Nordic countries (Pyykönen et al 2017, France (Le Ray et al 2015), Lithuania, Belgium, ...
- Recommendation by WHO in 2015 for assessing, comparing and monitoring CS rates in and between hospital facilities

Origin

- Need to control the cesarean section rates in each unit or country
- Difficulties to conduct audits
- 1st step of the analysis of CS rates: to take into account some factors which may influence the total CS rate
 - Maternal and fetal characteristics
 - Parity, previous CS, number of fetuses, presentation
 - Management of labour: induction, CS before labour, CS during labour

Construction

- 10 groups defined according to fetal & maternal characteristics

The 10-Group Classification

- 1 **Nulliparous** women with a single cephalic pregnancy, ≥ 37 weeks gestation in spontaneous labour
- 2 **Nulliparous** women with a single cephalic pregnancy, ≥ 37 weeks gestation who had labour induced or were delivered by CS before labour
- 3 **Multiparous women without a previous CS**, with a single cephalic pregnancy, ≥ 37 weeks gestation in spontaneous labour
- 4 **Multiparous women without a previous CS**, with a single cephalic pregnancy, ≥ 37 weeks gestation who had labour induced or were delivered by CS before labour
- 5 All multiparous women with **at least one previous CS**, with a single cephalic pregnancy, ≥ 37 weeks gestation
- 6 All **nulliparous** women with a single **breech** pregnancy
- 7 All **multiparous** women with a single **breech** pregnancy including women with previous CS(s)
- 8 All women with **multiple pregnancies** including women with previous CS(s)
- 9 All women with a single pregnancy with a **transverse or oblique lie**, including women with previous CS(s)
- 10 All women with a single cephalic pregnancy **< 37 weeks** gestation, including women with previous CS(s)

Construction

- 10 groups defined according to fetal & maternal characteristics
 - 12 groups if distinction of induction of labour/CS before labor in Groups 2 & 4 which include non spontaneous onset of labour
 - Extra group for women with missing data (unclassified) if necessary
- Calculation of 3 measures for each of the 10 groups
 - % of women in the group
 - CS rate in the group
 - % of the total CS rate explained by this group (=relative contribution of the group to the overall CS rate)
- See Robson Classification: Implementation Manual (WHO)
http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/robson-classification/en/

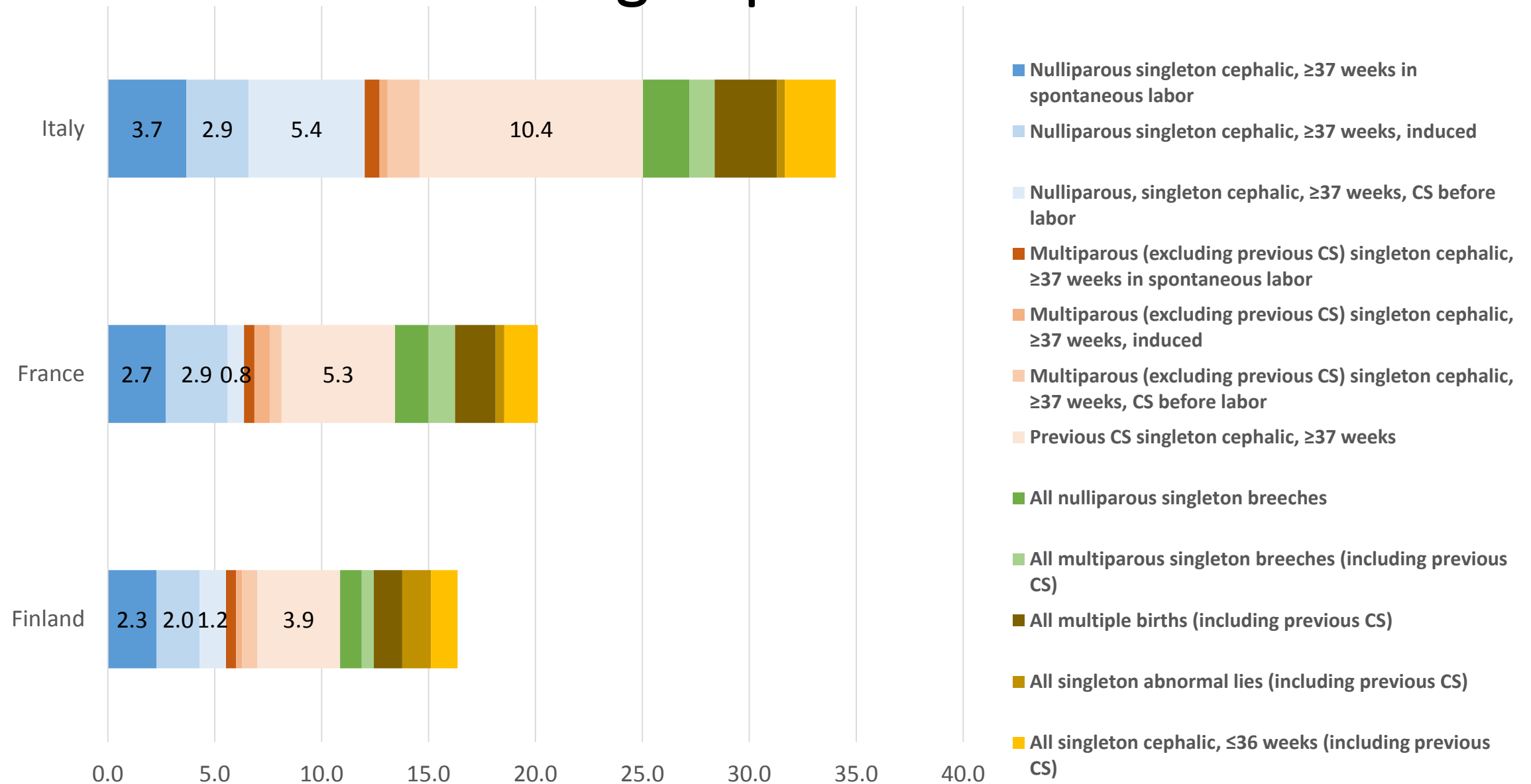
Usefulness of this classification

- Starting point of an audit strategy
 - Taking into account the impact of differences in maternal characteristics
 - Identification of groups which need special attention
 - 1st step of studies or audit on specific groups
- Very easy to use
 - Group definitions are clear and the data are often available in hospital databases
 - Groups are mutually exclusive
 - Groups have clear clinical meaning

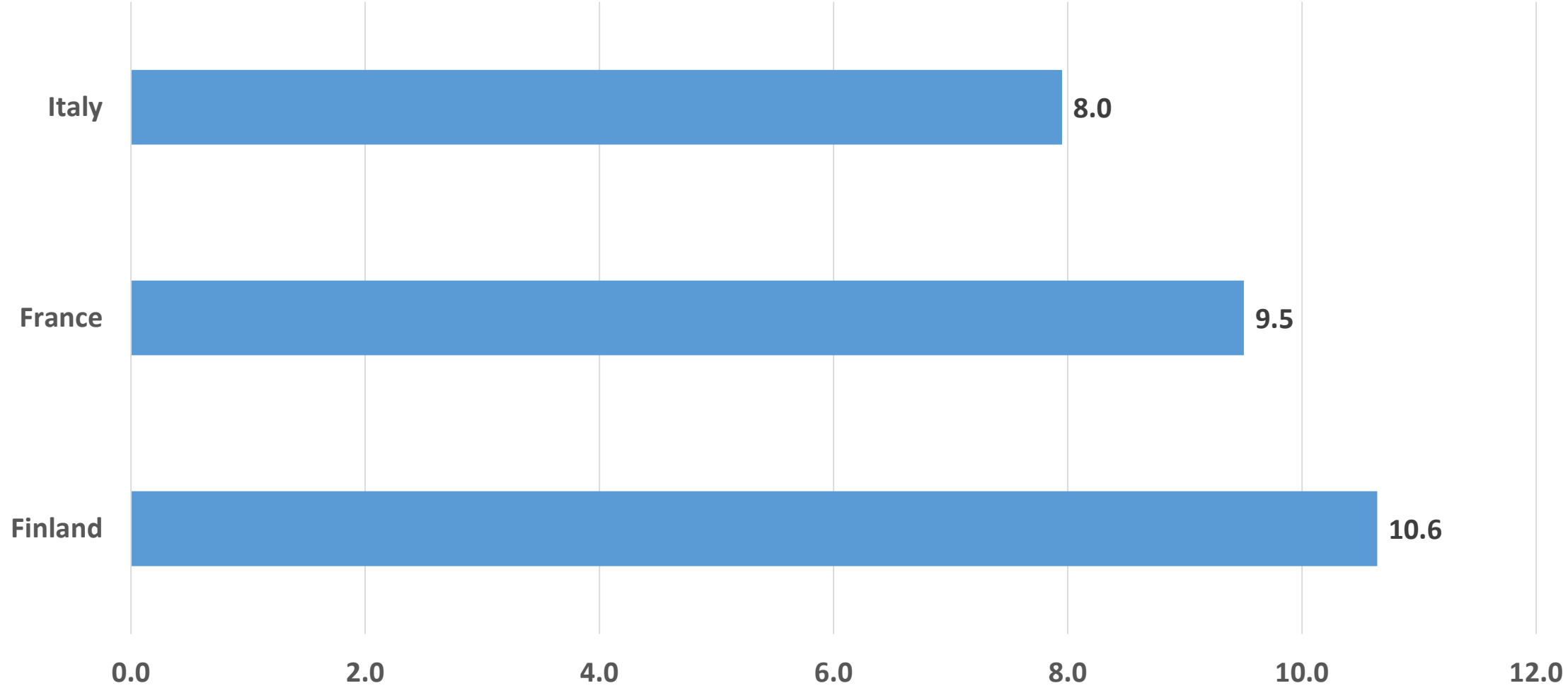
Countries providing Robson (18 + 2?)

- Belgium, Denmark, Estonia, France, Italy, Cyprus, Latvia, Luxembourg, Malta, Netherlands, Austria (PARTIAL), Slovenia, Finland, Sweden, UK: England (?), UK: Scotland, UK: Northern Ireland, Iceland, Norway, Switzerland
- Very preliminary results from 3 countries (next slides)

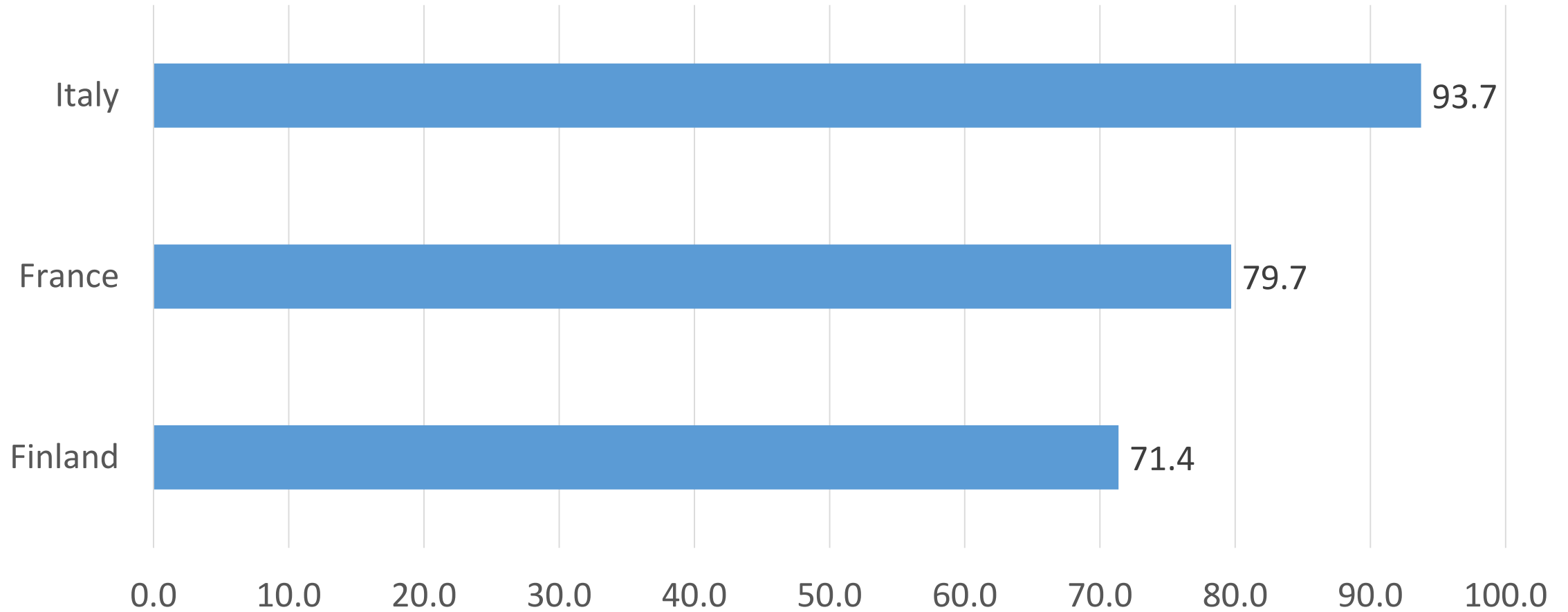
Contribution of each group to the CS rate



**Cesarean section among term nulliparous singleton cephalic presentations in
spontaneous labor (Robson category 1)**



**Cesarean section among term nulliparous with a single breech pregnancy
(Robson category 6)**



Summary of findings

- A little more than half of countries can provide Robson
- Complex data, so we will need time to review and analyze the data
- Need to reflect on how to present the data – not for inclusion in the report...