



## Fact sheet

### **What is clubfoot?**

Clubfoot, or congenital talipes equinovarus, is a treatable birth defect. Children with clubfoot are born with one or both feet (unilateral or bilateral) twisted inward and pointed downward. The foot is rigid and cannot be pushed back into the correct position. Most children born with clubfoot are not missing any bones, muscles, or connective tissue. It is a congenital condition, meaning that when it occurs it is always present at birth.

### **How common is clubfoot?**

Clubfoot is the most common musculoskeletal birth deformity and affects approximately 150,000-200,000 children each year. The majority of children born with clubfoot are in developing countries.

### **Does South Africa have a high incidence of clubfoot?**

Studies report that the Southern and East African population have a higher incidence of clubfoot, affecting about 1 in 500 children born in the region. This means that around 11,000 children are born with clubfoot in Southern Africa every year, 2,000 of them in South Africa.

### **Does clubfoot occur in one gender more than another?**

Clubfoot is more common in boys than girls. Researchers do not know exactly what causes clubfoot; it is idiopathic (unknown cause). However, if either of the parents were born with clubfoot, there is a higher chance that their children will have it.

### **How do you know whether your child has clubfoot?**

Parents will know at birth if their child has clubfoot because the condition is visible and the foot is fixed in the position. Some cases are diagnosed during a routine ultrasound before birth.

### **Is the condition painful?**

The condition is not painful for the newborn, but walking with an uncorrected clubfoot can be very painful and difficult, if not impossible.



### **What are the difficulties that children with clubfoot are likely to experience?**

Many older children live with the burden and stigma of untreated clubfoot. Untreated clubfoot has a long-term impact on a child's quality of life. Children in outlying areas or depressed economic conditions are especially affected by the lack of access to adequate care or information. These children face a life of disability due to untreated clubfoot, unable to wear shoes and unable to get an education, they are trapped in a cycle of poverty.

### **How is clubfoot treated?**

In the mid-20th century Dr Ignácio Ponseti, an orthopaedic surgeon living in Iowa USA developed a less invasive method for treating clubfoot. The 'Ponseti Method' consists of using a series of casts, gentle manipulation and the use of a clubfoot brace.

#### The two phases are:

*Correction phase:* the foot is gradually positioned into place with a series of manipulations and full-leg plaster casts, changed weekly over a 4-8 week period, before a minor procedure is done in clinic (tenotomy).

*Maintenance phase:* the child wears a clubfoot brace full-time for three months, and then when sleeping. The clubfoot brace maintains correction until the foot stabilises at age four or five.

### **What is a clubfoot brace?**

The clubfoot brace consists of shoes attached to an adjustable bar at a specific width and angle. The brace helps to retain the feet in the corrected position and is the most effective way to avoid recurrence.

### **How effective is this treatment?**

This treatment is over 95% effective and it is the most cost-effective treatment with no side effects. The Ponseti Method is also very cost efficient as it can be done in low resource settings and various healthcare providers can perform the treatment, making the Ponseti Method a practical option for eliminating untreated clubfoot.

### **When should treatment start?**

Treatment should start soon after birth.



### **Can clubfoot recur post a full treatment plan?**

Long-term research has shown that the Ponseti Method has the best results for clubfoot patients and is effective for older children, even in cases of failed surgery. Clubfoot recurrence is usually due to non-adherence but treatment can be started again and correction restored.

### **Who are STEPS?**

STEPS CHARITY NPC was established in 2005 as the only NPO in South Africa focused on clubfoot support. STEPS founder Karen Mara Moss introduced the Ponseti Method to South Africa after her son was born with the condition in 2003 and treated successfully by Dr Ponseti in Iowa USA. STEPS organised Ponseti training in South Africa, Botswana, Namibia and the Seychelles that were welcomed and well supported by paediatric orthopaedic surgeons and other health professionals. This significantly revolutionised clubfoot treatment in South Africa.

### **What does STEPS do now?**

STEPS launched a clinic support programme in 2013 to bridge the gaps in under resourced state clinics. Focused on patient-centred support, STEPS Clubfoot Care supports 38 partner clinics in the state health sector.

STEPS Ponseti for Parents © Education materials are translated into 10 languages, including 7 official languages, and used by doctors and clinics and parents all over Africa. STEPS Cape Town office offers daily support to clubfoot families.

STEPS trains health professionals, distributes clubfoot braces and raises awareness that clubfoot is a treatable condition.

### **Who are the STEPS beneficiaries?**

Predominantly children attending state clinics, from birth to five years old. The families are from low-income households, they have not received adequate pre-natal care, and not have access to clubfoot education. In addition, awareness in the larger community is generally low.

### **How do we know that STEPS is an effective NPC?**

STEPS' innovative approach and theory of change model has won awards such as the SAB Foundation Social Innovation Awards.



**To date, STEPS impact has been:**

- 18,500+ patients treated with the Ponseti Method.
- 38 partner clinics
- 1,616 healthcare professionals trained directly by Steps
- 6,662 children enrolled at partner clinics since 2013
- 18,000+ clubfoot braces distributed

**What is the Steps Clubfoot Care Clinic Partner breakdown per province?**

38 Partner clinics as at July 2023:

- Eastern Cape - 7
- Free State - 5
- Gauteng - 5
- Limpopo - 1
- Mpumalanga – 3
- Northern Cape - 2
- North West - 2
- Kwa-Zulu Natal – 7
- Western Cape - 6

**How many children were treated at Steps Partner Clinics in 2022?**

- Total new patients enrolled: 1 032
- Total patient clinic visits: 16 027
- Total estimated number of patients in treatment: 4 167

**What do the patient numbers look like to date for 2023?**

- Total new patients enrolled Jan to June 2023: 545
- Total patient clinic visits Jan to June 2023: 9 252

**Who do we contact for more information?**

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**Where can we find more resources and information?**

[www.steps.org.za](http://www.steps.org.za)